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Timber Product Volume Tables for Jack Pine and Red Pine in Ontario

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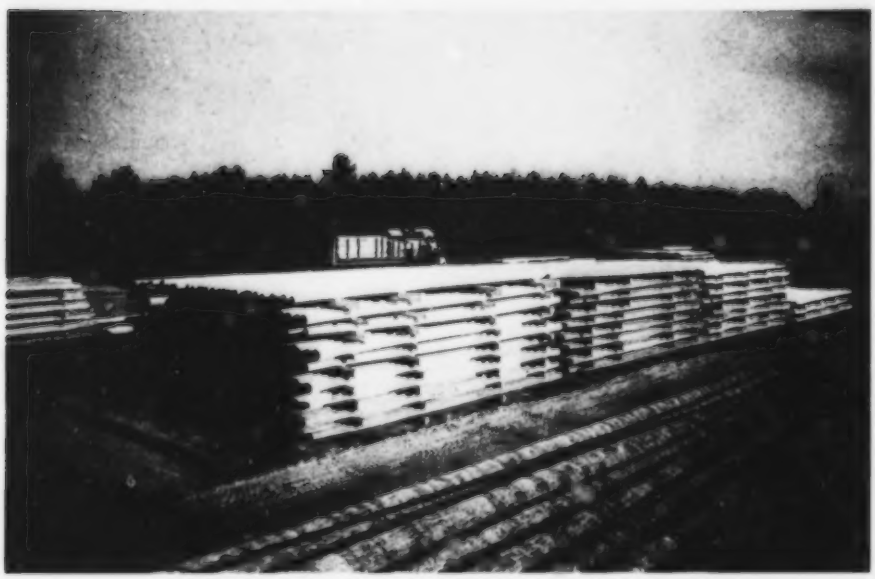

Ontario

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Timber Product Volume Tables for Jack Pine and Red Pine in Ontario

Murray E. Woods[1] and Wojciech T. Zakrzewski[2]

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Abstract

Timber product volume tables were produced for jack pine (*Pinus banksiana* Lamb.) and red pine (*Pinus resinosa* Ait.). These were generated using an individual-tree stem profile equation (Zakrzewski 1999) calibrated with Ontario data sets. The model describes inside-bark diameters along a tree stem. The equation, after analytical integration, provides a volume estimate for any user-defined section of the tree. In addition, the model also allows the user to determine the height of a specified upper inside-bark diameter. The required input is an outside-bark tree diameter at breast height (DBH) and a total tree height (H). Tables of volume estimates by multiple upper diameter limits and pole specifications are provided in the appendices.

Introduction

Assessing timber products available from a given stand is important to forest managers. Here, we present a series of tables to be used in estimating available timber product volumes. Tables have been produced for jack pine (*Pinus banksiana* Lamb.) and red pine (*Pinus resinosa* Ait.) using a new stem profile equation (Zakrzewski 1999). The tables provide a simple tool for forest managers to use to predict timber product volume and location of upper diameter merchantability limits.

The model used for producing the timber product tables represents some improvement over existing models. Commercial timber volumes in Ontario are usually estimated using equations from Honer et al. (1983).

These equations provide an adequate average representation of tree taper for a range of species across Canada, but they do not provide a mathematically tractable description of a tree stem profile, and are not calibrated specifically for Ontario. Alemdag's (1990) taper model describes stem profile for different species in Ontario; although mathematically tractable, it only provides good predictions for the middle portion of the stem. Among the many stem profile curves published, Kozak's model has demonstrated the potential to fit many complex stem profile curves. However, its inherent weaknesses (Kozak and Smith 1993) include that it is not analytically integrable and does not provide an analytical estimate of stem volume; neither can it be analytically solved for height for a given diameter. Newnham's (1988) simple taper function shows the same weaknesses. Increasing speed of computer calculations makes the requirement for analytical solutions of the model less crucial. This model feature, however, is still desirable, when more advanced calculations, like timber product optimization, are desired.

Model Form

The taper model by Zakrzewski (1994, 1999) performs well for trees of commercial size. The model has the following strengths:

i) it uses commonly measured tree attributes: diameter at breast height outside bark *DBH* and total tree height *H;*

ii) the stem-profile equation is analytically integrable and solvable to provide:

a) inside-bark diameter predictions (*d*) at any user-specified height on the stem (*h*);

b) height location predictions (*h*) for a user-defined inside-bark diameter (*d*);

c) inside-bark volume estimates of any part of the stem, according to the specified height limits (*h*), or diameter (*d*) limits that conform with merchantability criteria, e.g., stump height, sawlog size limits, utility pole top stem circumference limit;

iii) it uses *H/DBH* ratio, and thus, is stand density sensitive.

The need to calibrate (localize) stem profile models for Ontario is debatable. The authors feel that sampling locally to calibrate a model increases the level of confidence in the values the model generates. This is based on the acceptance of the concept of genetically determined uniformity within a species stem profile in a local population. However, it is also well known that stand density can affect tree taper enough to blur species uniformity. The fact that density influences a tree's taper has prompted some modelers to include variables such as stand quadratic mean diameter into a formal definition of individual tree form factor (see Bruchwald 1986). The presented model incorporates a height/diameter ratio instead. Height/diameter correlates strongly with live crown ratio (see Newnham 1988), and should account for most of the influences of stand density on individual tree taper.

The general model describes cross-sectional areas (ca_z) along the relative stem height location z:

$$ca_z = K\frac{z^2 + A\,z^3 + B\,z^4}{z - s}$$

where K is a tree-specific constant and s is a tree–specific slenderness factor ($1 + C\ H/DBH$), and A, B, and C are model coefficients.

The model is a product of 2 functions:

$K/(1 - s/z)$ describes "a pattern", a concave generator of a physically stable solid of revolution, and is controlled by the slenderness factor, s (involving coefficient C).

$z + Az^2 + Bz^3$ is "a modifier", a third degree polynomial with no intercept (involving coefficients A and B).

Notice that a model with the same species-specific coefficients generates different stem profile lines for trees of the same species with different slenderness (*H/DBH*).

Data

The model was calibrated using the following data:

Jack pine: Eighty-six stem-analyzed trees were used to calibrate the model. Trees were sampled randomly across northwestern Ontario. They ranged from 3 to 37cm in diameter and from 5 to 22m in height. Stems were cut into 15–40cm sections, with 13 to 47 measurements per stem. All the trees used to calibrate the model were also used to compare the new model estimates with those generated by Honer's formula.

Red pine: Two hundred and forty-four stem-analyzed Ontario red pine trees from the Canadian data bank (MacLeod 1978) were used. Trees ranged from 7 to 50cm in *DBH*, and from 5 to 25m in height, with 5 to 12 measurements per stem.

An additional independent data set from Ontario (275 trees) was used to compare volume predictions from the new model with those from Honer's model. These trees were a subset of data collected throughout eastern and central Ontario. Trees used for stem analysis were cut during thinning operations. Publications based on this data set include plantation red pine yield tables (Beckwith et al. 1983).

Results of Model Calibration and Discussion

The results of model calibration for jack pine are presented in Zakrzewski 1999. Results for red pine are very similar to those reported for jack pine. Final coefficients for both species are presented in Table 1. The bark reduction factor used in the model to adjust outside bark *DBH* to inside bark *DBH* is also presented (based on the results of the linear regression of a double bark thickness on outside bark *DBH*, with no intercept). Figure 1 presents a stem profile view of diameter versus relative stem height.

Table 1. Estimates of model coefficients and 95% asymptotic confidence intervals (for nonlinear fit).

Coefficients	Red pine	Jack pine
A	-1.712726 (-1.729963 to -1.69549)	-1.72170 (-1.75045 to -1.69296)
B	0.787301 (0.787301 to 0.802999)	0.84388 (0.81663 to 0.87113)
C	0.474187 (0.406518 to 0.541856)	1
Bark Reduction Factor	0.9218	0.9609

Fitting the integrated model (1) to jack pine and red pine resulted in unbiased volume estimates with standard deviation of errors of 7.24% for jack pine and 5.88% for red pine. For jack pine, coefficient $C = 1$ was accepted (Zakrzewski, 1999). For red pine, the coefficient C, which improved the description of the influence of slenderness on stem profile, was necessary to avoid a correlation of volume prediction error and tree size (*DBH*).

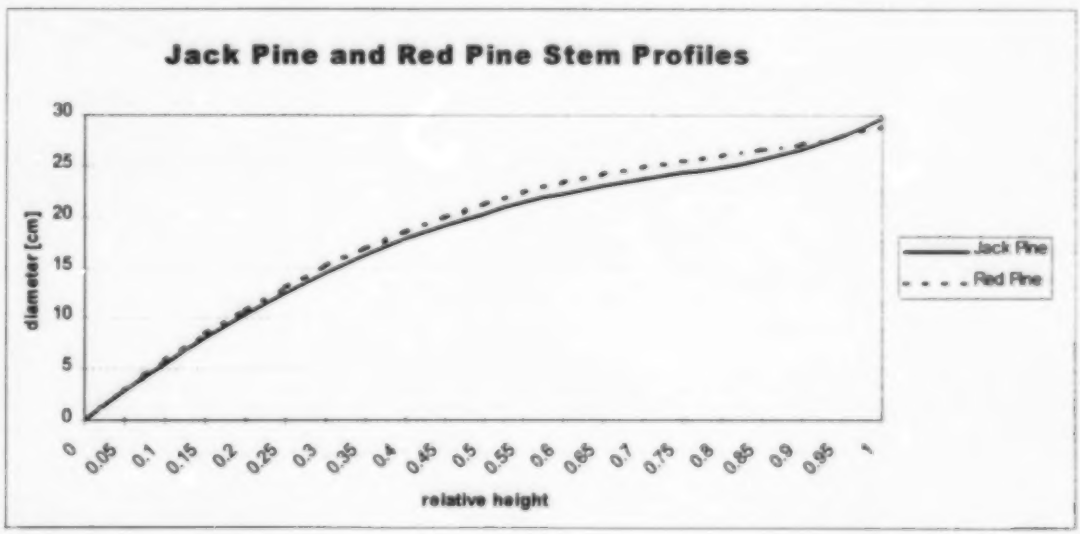

Figure 1. Jack pine and red pine stem profiles (inside bark).

Tables 2 and 3 show diameter prediction bias at various locations on the tree stem. Diameter prediction errors seem to have a homogeneous variance of about 1cm for both species.

In validation tests, this model gave predictions that improved on those generated by Honer's model. Our model estimated the volume of 86 jack pine trees with an unbiased prediction of the precision equal to 7.85%. Honer's formula generated a significant bias and a precision of 8.45%. Mean error of our absolute volume estimates was -0.0006 m^3 with a standard error of 0.0274 m^3, whereas Honer's formula provided more biased predictions with a similar standard deviation.

The new model estimated the volume for 275 red pine trees in the independent sample with a standard deviation of errors equal to 8.0%. Honer's formula had a precision of 8.3%. Mean error of our absolute volume estimates was 0.013 m^3 with a standard error 0.002 m^3, whereas Honer's formula had a bias of -0.013 (negative bias) and a larger standard deviation of errors.

The new model was also used to predict the volume of merchantable logs for 86 jack pine and 275 red pine stems. Logs were defined as the part of the stem with no stump, and top height limit not greater than 65% of the total height of the tree. For jack pine, the standard deviation of errors of volume estimates for such logs was 7.24%. The predictions had a bias of 0.004 m^3 with a standard error of 0.0024 m^3. For red pine, the standard deviation of errors of volume estimates for merchantable log lengths was 8.3%. The predictions had a bias of 0.009 m^3 indicating overestimation of volume for the sample. Graphs depicting actual volume versus predicted volume for jack and red pine are presented in Figure 2. Figure 3 shows the percent relative volume errors across the DBH classes for each species.

Timber Product Yield Tables

Timber product tables for jack pine and red pine are presented in Appendix A and B, respectively.

Tables presented in each appendix include:

1) sawlog and pulp estimates
2) utility pole and pulp estimates
3) height of upper diameter limits

The table derived for sawlogs uses a range of size standards for a range of *DBH*s (outside bark), heights and merchantable top diameter (inside bark) limits. Note that the imperial 8-foot log is equivalent to a 2.54-m log (includes broomage). A standard stump height of 0.3m was applied for all calculations.

The table derived for utility poles uses the specifications outlined in CAN-3-015-M83 (metric standard), CAN/CSA 015-90 (imperial) and the ANSI 05.1 (American National Standard).

Red pine and jack pine poles are estimated from tables listed in CSA 015. Utility poles for both species were defined to meet the highest standards related to stem diameters (rather than lengths). The estimate of pulp volume (and unmerchantable volume) was a by-product of merchandizing for utility poles. **Note: These estimates cannot include the other stem quality attributes (e.g., knot criteria) used when assessing suitability for poles.**

Table 2. Bias in jack pine diameter predictions (results of OLS nonlinear volume fit of model).

Relative height (ground level=0)	Mean bias (in cm)	Standard error of mean (in cm)	Standard deviation of predictions (in cm)	Number of observations
0.05	-0.05	0.03	0.68	495
0.15	0.06	0.06	1.11	322
0.25	0.22	0.07	1.13	259
0.35	0.19	0.07	1.10	196
0.45	0.03	0.07	0.94	155
0.55	-0.19	0.08	1.02	147
0.65	-0.18	0.07	0.87	143
0.75	0.08	0.06	0.71	140
0.85	0.00	0.04	0.62	178
0.95	0.84	0.06	1.50	469

Table 3. Bias in red pine diameter predictions (results of OLS nonlinear volume fit of model).

Relative height (ground level=0)	Mean bias (in cm)	Standard error of mean (in cm)	Standard deviation of predictions (in cm)	Number of observations
0.05	0.24	0.03	0.68	463
0.15	0.38	0.08	1.21	250
0.25	0.09	0.08	1.26	241
0.35	-0.01	0.08	1.21	245
0.45	0.04	0.06	0.99	244
0.55	0.25	0.06	0.89	245
0.65	0.33	0.06	0.88	254
0.75	0.19	0.05	0.77	254
0.85	0.07	0.04	0.72	259
0.95	-1.10	0.07	1.46	441

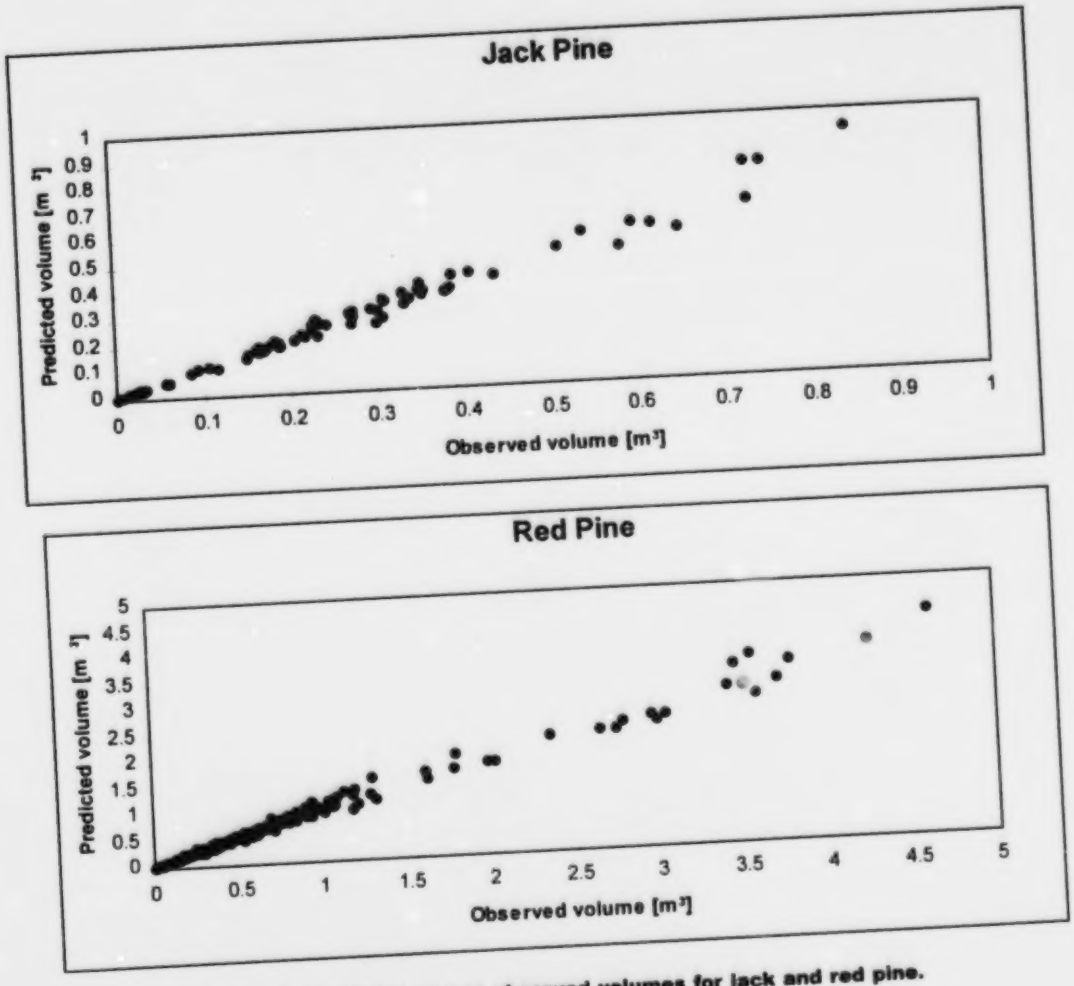

Figure 2. Predicted versus observed volumes for jack and red pine.

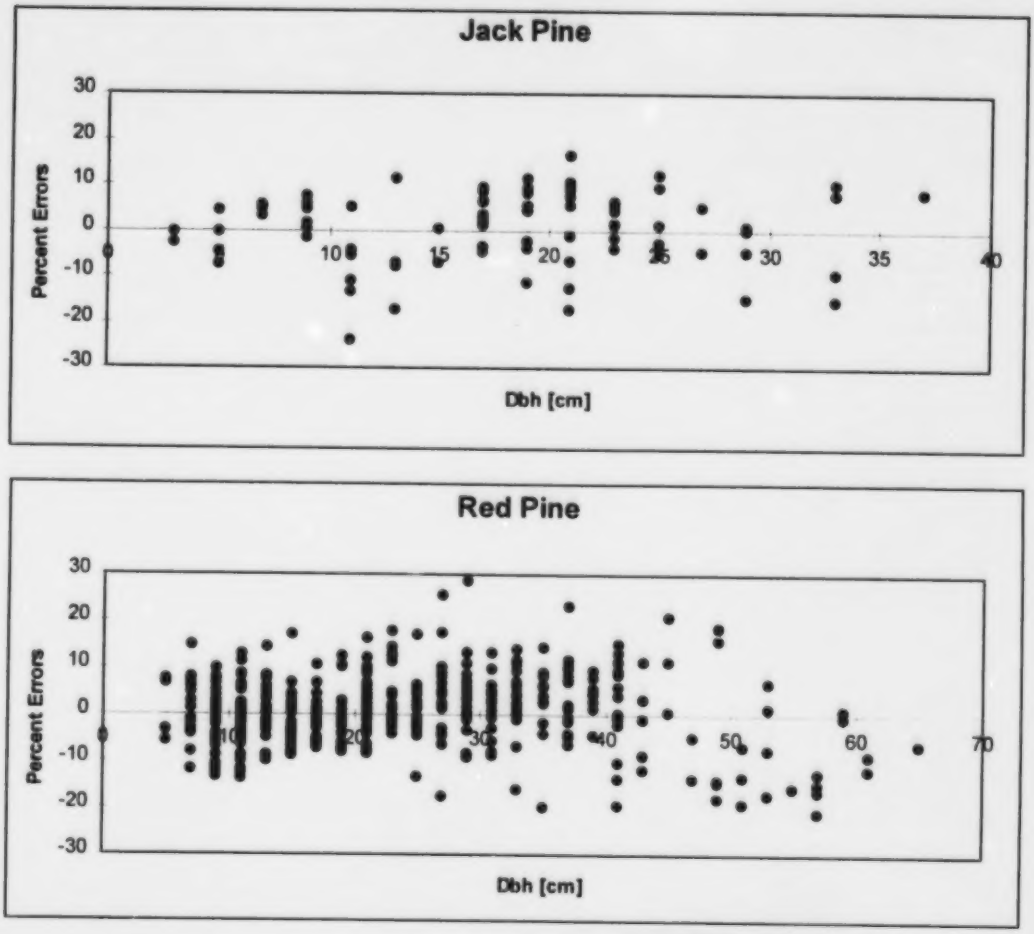

Figure 3. Relative volume errors by Dbh classes for jack and red pine.

Literature Cited

ALEMDAG, I.S. 1990. Merchantable volume conversion factors and taper equations for commercial tree species of Ontario. For. Can. Petawawa Nat. For. Ins., Chalk River, Ont. PNFI Tech. Rep. Fo29-26/1E.

BECKWITH, A.F., P. ROEBBELEN and V.G. SMITH. 1983. Red pine plantation growth and yield tables. Ont. Min. Nat. Resour., Ont. For. Res. Instit., For. Res. Rep. No. 108. 70p.

BRUCHWALD, A., 1986: Dendrometria. (In Polish) Warsaw Agricultural University Press, Warsaw, Poland.

HONER, T.G., M.F. KER and I.S. ALEMDAG 1983. Metric timber tables for the commercial tree species of central and eastern Canada. Dep. Environ., Can. For. Serv., Fredericton, N.B., Inf. Rep. M-X-140.

KOZAK, A. 1988. A variable-exponent taper equation. Can. J. For. Res. 18:1363-1368.

KOZAK A., and J.H.G. SMITH 1993. Standards for evaluating taper estimating systems. For. Chron. 69 (4):438-444.

MACLEOD, D. 1978. The Forest Management Institute Tree Data Bank. For. Man. Inst. Inf. Rep. FMR-X-112. June 1978. Ottawa, Ont.

NEWNHAM, R.M., 1988. A variable-form taper function. For. Can., Petawawa Nat. For. Ins., Chalk River, Ont. Inf. Rep. PI-X-*3

ZAKRZEWSKI, W.T. 1994. A new integrable stem profile equation. Poster presentation at The Joint Conference of Western Mensurationists Association and Western Forest Genetics Association. Vancouver, WA. June 27-July 1, 1994.

ZAKRZEWSKI, W.T. 1999. A mathematically tractable stem profile model for jack pine in Ontario. N.J. Appl. For 16(3):138–143.

Appendix A-1
Jack Pine Sawlog and Pulp Volume Tables

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Jack Pine Sawlog and Pulp Volume Estimates

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.0343	0.0049	0.0298		0	0.0000	2	0.0289	0.0025	5.79	2	0.0289	0.0025
	0.0486	0.0270	0.0430	2.98	1	0.0259	1	0.0150	0.0034	6.16	2	0.0409	0.0034

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.0343	0	0.0298		0	0	2	0.0289	0.0025	5.79	2	0.0289	0.0025
	0.0486	0	0.0430		0	0	2	0.0409	0.0034	6.16	2	0.0409	0.0034

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.0343	0	0.0298		0	0	2	0.0289	0.0025	5.79	2	0.0289	0.0025
	0.0486	0	0.0430		0	0	2	0.0409	0.0034	6.16	2	0.0409	0.0034

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.0343	0	0.02978		0	0	2	0.0289	0.00252	5.79	2	0.0289	0.0025
	0.0486	0	0.0430		0	0	2	0.0409	0.0034	6.16	2	0.0409	0.0034

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.0343	0	0.0298		0	0	2	0.0289	0.0025	5.79	2	0.0289	0.0025
	0.0486	0	0.0430		0	0	2	0.0409	0.0034	6.16	2	0.0409	0.0034

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.0343	0	0.0298		0	0	2	0.0289	0.0025	5.79	2	0.0289	0.0025
	0.0486	0	0.0430		0	0	2	0.0409	0.0034	6.16	2	0.0409	0.0034

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0418	0.0041	0.0372		0	0	2	0.0314	0.0078	7.27	2	0.0314	0.0078
0.0591	0.0327	0.0535	3.64	1	0.02605	1	0.0185	0.0106	7.74	2	0.0445	0.0106
0.0790	0.0579	0.0721	5.14	1	0.03539	2	0.0365	0.0016	8.05	3	0.0719	0.0016
0.1016	0.0818	0.0931	5.93	2	0.07711	1	0.0151	0.0020	8.27	3	0.0922	0.0020
0.1268	0.1068	0.1163	6.45	2	0.09651	1	0.0184	0.0024	8.45	3	0.1149	0.0024

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0418	0	0.0372		0	0	2	0.0314	0.0078	7.27	2	0.0314	0.0078
0.0591	0	0.0535		0	0	2	0.0445	0.0106	7.74	2	0.0445	0.0106
0.0790	0	0.0721		0	0	3	0.0719	0.0016	8.05	3	0.0719	0.0016
0.1016	0.0259	0.0931	1.59	0	0	3	0.0922	0.0020	8.27	3	0.0922	0.0020
0.1268	0.0637	0.1163	3.14	1	0.05833	2	0.0566	0.0024	8.45	3	0.1149	0.0024

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0418	0.0000	0.0372		0	0.0000	2	0.0314	0.0078	7.27	2	0.0314	0.0078
0.0591	0.0000	0.0535		0	0.0000	2	0.0445	0.0106	7.74	2	0.0445	0.0106
0.0790	0.0000	0.0721		0	0.0000	3	0.0719	0.0016	8.05	3	0.0719	0.0016
0.1016	0.0000	0.0931		0	0.0000	3	0.0922	0.0020	8.27	3	0.0922	0.0020
0.1268	0.0000	0.1163		0	0.0000	3	0.1149	0.0024	8.45	3	0.1149	0.0024

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0418	0.0000	0.0372		0	0.0000	2	0.0314	0.0078	7.27	2	0.0314	0.0078
0.0591	0.0000	0.0535		0	0.0000	2	0.0445	0.0106	7.74	2	0.0445	0.0106
0.0790	0.0000	0.0721		0	0.0000	3	0.0719	0.0016	8.05	3	0.0719	0.0016
0.1016	0.0000	0.0931		0	0.0000	3	0.0922	0.0020	8.27	3	0.0922	0.0020
0.1268	0.0000	0.1163		0	0.0000	3	0.1149	0.0024	8.45	3	0.1149	0.0024

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0418	0.0000	0.0372		0	0.0000	2	0.0314	0.0078	7.27	2	0.0314	0.0078
0.0591	0.0000	0.0535		0	0.0000	2	0.0445	0.0106	7.74	2	0.0445	0.0106
0.0790	0.0000	0.0721		0	0.0000	3	0.0719	0.0016	8.05	3	0.0719	0.0016
0.1016	0.0000	0.0931		0	0.0000	3	0.0922	0.0020	8.27	3	0.0922	0.0020
0.1268	0.0000	0.1163		0	0.0000	3	0.1149	0.0024	8.45	3	0.1149	0.0024

Jack Pine Sawlog and Pulp Volume Estimates

8 metre

Total Height - 8 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

	Sawlog, Pulp & Unmerchantable Volume								Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0343	0.0049	0.0298		0	0.0000	2	0.0289	0.0025	5.79	2	0.0289	0.0025
12	0.0486	0.0270	0.0430	2.98	1	0.0259	1	0.0150	0.0034	6.16	2	0.0409	0.0034

Total Height - 8 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

	Sawlog, Pulp & Unmerchantable Volume								Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0343	0	0.0298		0	0	2	0.0289	0.0025	5.79	2	0.0289	0.0025
12	0.0486	0	0.0430		0	0	2	0.0409	0.0034	6.16	2	0.0409	0.0034

Total Height - 8 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

	Sawlog, Pulp & Unmerchantable Volume								Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0343	0	0.0298		0	0	2	0.0289	0.0025	5.79	2	0.0289	0.0025
12	0.0486	0	0.0430		0	0	2	0.0409	0.0034	6.16	2	0.0409	0.0034

Total Height - 8 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

	Sawlog, Pulp & Unmerchantable Volume								Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0343	0	0.02978		0	0	2	0.0289	0.00252	5.79	2	0.0289	0.0025
12	0.0486	0	0.0430		0	0	2	0.0409	0.0034	6.16	2	0.0409	0.0034

Total Height - 8 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

	Sawlog, Pulp & Unmerchantable Volume								Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0343	0	0.0298		0	0	2	0.0289	0.0025	5.79	2	0.0289	0.0025
12	0.0486	0	0.0430		0	0	2	0.0409	0.0034	6.16	2	0.0409	0.0034

Total Height - 8 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

	Sawlog, Pulp & Unmerchantable Volume								Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0343	0	0.0298		0	0	2	0.0289	0.0025	5.79	2	0.0289	0.0025
12	0.0486	0	0.0430		0	0	2	0.0409	0.0034	6.16	2	0.0409	0.0034

Jack Pine Sawlog and Pulp Volume Estimates

10 metre

Total Height - 10 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0418	0.0041	0.0372		0	0	2	0.0314	0.0078	7.27	2	0.0314	0.0078
12	0.0591	0.0327	0.0535	3.64	1	0.02605	1	0.0185	0.0106	7.74	2	0.0445	0.0106
14	0.0790	0.0579	0.0721	5.14	1	0.03539	2	0.0365	0.0016	8.05	3	0.0719	0.0016
16	0.1016	0.0818	0.0931	5.93	2	0.07711	1	0.0151	0.0020	8.27	3	0.0922	0.0020
18	0.1268	0.1068	0.1163	6.45	2	0.09651	1	0.0184	0.0024	8.45	3	0.1149	0.0024

Total Height - 10 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0418	0	0.0372		0	0	2	0.0314	0.0078	7.27	2	0.0314	0.0078
12	0.0591	0	0.0535		0	0	2	0.0445	0.0106	7.74	2	0.0445	0.0106
14	0.0790	0	0.0721		0	0	3	0.0719	0.0016	8.05	3	0.0719	0.0016
16	0.1016	0.0259	0.0931	1.59	0	0	3	0.0922	0.0020	8.27	3	0.0922	0.0020
18	0.1268	0.0637	0.1163	3.14	1	0.05833	2	0.0566	0.0024	8.45	3	0.1149	0.0024

Total Height - 10 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0418	0.0000	0.0372		0	0.0000	2	0.0314	0.0078	7.27	2	0.0314	0.0078
12	0.0591	0.0000	0.0535		0	0.0000	2	0.0445	0.0106	7.74	2	0.0445	0.0106
14	0.0790	0.0000	0.0721		0	0.0000	3	0.0719	0.0016	8.05	3	0.0719	0.0016
16	0.1016	0.0000	0.0931		0	0.0000	3	0.0922	0.0020	8.27	3	0.0922	0.0020
18	0.1268	0.0000	0.1163		0	0.0000	3	0.1149	0.0024	8.45	3	0.1149	0.0024

Total Height - 10 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0418	0.0000	0.0372		0	0.0000	2	0.0314	0.0078	7.27	2	0.0314	0.0078
12	0.0591	0.0000	0.0535		0	0.0000	2	0.0445	0.0106	7.74	2	0.0445	0.0106
14	0.0790	0.0000	0.0721		0	0.0000	3	0.0719	0.0016	8.05	3	0.0719	0.0016
16	0.1016	0.0000	0.0931		0	0.0000	3	0.0922	0.0020	8.27	3	0.0922	0.0020
18	0.1268	0.0000	0.1163		0	0.0000	3	0.1149	0.0024	8.45	3	0.1149	0.0024

Total Height - 10 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0418	0.0000	0.0372		0	0.0000	2	0.0314	0.0078	7.27	2	0.0314	0.0078
12	0.0591	0.0000	0.0535		0	0.0000	2	0.0445	0.0106	7.74	2	0.0445	0.0106
14	0.0790	0.0000	0.0721		0	0.0000	3	0.0719	0.0016	8.05	3	0.0719	0.0016
16	0.1016	0.0000	0.0931		0	0.0000	3	0.0922	0.0020	8.27	3	0.0922	0.0020
18	0.1268	0.0000	0.1163		0	0.0000	3	0.1149	0.0024	8.45	3	0.1149	0.0024

Jack Pine Sawlog and Pulp Volume Estimates

10 metre

Total Height - 10 m				Sawlog Upper Diameter - 35 cm						Stump height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 9 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0418	0.0000	0.0372		0	0.0000	2	0.0314	0.0078	7.27	2	0.0314	0.0078
12	0.0591	0.0000	0.0535		0	0.0000	2	0.0445	0.0106	7.74	2	0.0445	0.0106
14	0.0790	0.0000	0.0721		0	0.0000	3	0.0719	0.0016	8.05	3	0.0719	0.0016
16	0.1016	0.0000	0.0931		0	0.0000	3	0.0922	0.0020	8.27	3	0.0922	0.0020
18	0.1268	0.0000	0.1163		0	0.0000	3	0.1149	0.0024	8.45	3	0.1149	0.0024

Jack Pine Sawlog and Pulp Volume Estimates

12 metre

Total Height - 12 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper bark (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0497	0.0034	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0388	0.0643	4.34	1	0.0261	2	0.0342	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0696	0.0866	6.22	2	0.0625	1	0.0181	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0982	0.1116	7.18	2	0.0807	1	0.0227	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.1280	0.1392	7.80	2	0.1011	1	0.0278	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.1596	0.1694	8.25	3	0.1568	0	0.0000	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.1934	0.2021	8.60	3	0.1872	0	0.0000	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.2294	0.2373	8.87	3	0.2200	1	0.0171	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.2677	0.2750	9.10	3	0.2551	1	0.0195	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.3084	0.3151	9.29	3	0.2926	1	0.0219	0.0015	10.74	4	0.3145	0.0015

Total Height - 12 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper bark (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0497	0.0000	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0000	0.0643		0	0.0000	3	0.0603	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0000	0.0866		0	0.0000	3	0.0805	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0266	0.1116	1.65	0	0.0000	3	0.1034	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.0739	0.1392	3.67	1	0.0585	2	0.0704	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.1193	0.1694	5.13	1	0.0721	2	0.0847	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.1606	0.2021	6.04	2	0.1483	1	0.0389	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.2014	0.2373	6.67	2	0.1750	2	0.0621	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.2431	0.2750	7.15	2	0.2038	2	0.0708	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.2862	0.3151	7.53	2	0.2346	2	0.0799	0.0015	10.74	4	0.3145	0.0015

Total Height - 12 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper bark (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0497	0.0000	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0000	0.0643		0	0.0000	3	0.0603	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0000	0.0866		0	0.0000	3	0.0805	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0000	0.1116		0	0.0000	3	0.1034	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.0000	0.1392		0	0.0000	3	0.1289	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.0192	0.1694	0.87	0	0.0000	3	0.1568	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.0618	0.2021	1.99	0	0.0000	3	0.1872	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.1165	0.2373	3.24	1	0.1036	3	0.1335	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.1733	0.2750	4.33	1	0.1214	3	0.1531	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.2274	0.3151	5.15	1	0.1407	3	0.1737	0.0015	10.74	4	0.3145	0.0015

Jack Pine Sawlog and Pulp Volume Estimates

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
10	0.0418	0.0000	0.0372		0	0.0000	2	0.0314	0.0078	7.27	2	0.0314	0.0078
12	0.0591	0.0000	0.0535		0	0.0000	2	0.0445	0.0106	7.74	2	0.0445	0.0106
14	0.0790	0.0000	0.0721		0	0.0000	3	0.0719	0.0016	8.05	3	0.0719	0.0016
16	0.1016	0.0000	0.0931		0	0.0000	3	0.0922	0.0020	8.27	3	0.0922	0.0020
18	0.1266	0.0000	0.1163		0	0.0000	3	0.1149	0.0024	8.45	3	0.1149	0.0024

Jack Pine Sawlog and Pulp Volume Estimates

12 metre

Total Height - 12 m | **Sawlog Upper Diameter - 12 cm** | **Stump Height - 0.3 m**

	Sawlog, Pulp & Unmerchantable Volume									Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0497	0.0034	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0388	0.0643	4.34	1	0.0261	2	0.0342	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0696	0.0866	6.22	2	0.0625	1	0.0181	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0982	0.1116	7.18	2	0.0807	1	0.0227	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.1280	0.1392	7.80	2	0.1011	1	0.0278	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.1596	0.1694	8.25	3	0.1568	0	0.0000	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.1934	0.2021	8.60	3	0.1872	0	0.0000	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.2294	0.2373	8.87	3	0.2200	1	0.0171	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.2677	0.2750	9.10	3	0.2551	1	0.0195	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.3084	0.3151	9.29	3	0.2926	1	0.0219	0.0015	10.74	4	0.3145	0.0015

Total Height - 12 m | **Sawlog Upper Diameter - 15 cm** | **Stump Height - 0.3 m**

	Sawlog, Pulp & Unmerchantable Volume									Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0497	0.0000	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0000	0.0643		0	0.0000	3	0.0603	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0000	0.0866		0	0.0000	3	0.0805	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0266	0.1116	1.65	0	0.0000	3	0.1034	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.0739	0.1392	3.67	1	0.0585	2	0.0704	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.1193	0.1694	5.13	1	0.0721	2	0.0847	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.1606	0.2021	6.04	2	0.1483	1	0.0389	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.2014	0.2373	6.67	2	0.1750	2	0.0621	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.2431	0.2750	7.15	2	0.2038	2	0.0708	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.2862	0.3151	7.53	2	0.2346	2	0.0799	0.0015	10.74	4	0.3145	0.0015

Total Height - 12 m | **Sawlog Upper Diameter - 20 cm** | **Stump Height - 0.3 m**

	Sawlog, Pulp & Unmerchantable Volume									Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0497	0.0000	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0000	0.0643		0	0.0000	3	0.0603	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0000	0.0866		0	0.0000	3	0.0805	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0000	0.1116		0	0.0000	3	0.1034	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.0000	0.1392		0	0.0000	3	0.1289	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.0192	0.1694	0.87	0	0.0000	3	0.1568	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.0618	0.2021	1.99	0	0.0000	3	0.1872	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.1165	0.2373	3.24	1	0.1036	3	0.1335	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.1733	0.2750	4.33	1	0.1214	3	0.1531	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.2274	0.3151	5.15	1	0.1407	3	0.1737	0.0015	10.74	4	0.3145	0.0015

Jack Pine Sawlog and Pulp Volume Estimates

Total Height - 12 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
10	0.0497	0.0000	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0000	0.0643		0	0.0000	3	0.0603	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0000	0.0866		0	0.0000	3	0.0805	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0000	0.1116		0	0.0000	3	0.1034	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.0000	0.1392		0	0.0000	3	0.1289	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.0000	0.1694		0	0.0000	3	0.1568	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.0000	0.2021		0	0.0000	3	0.1872	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.0135	0.2373	0.57	0	0.0000	4	0.2371	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.0548	0.2750	1.29	0	0.0000	4	0.2746	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.1065	0.3151	2.10	0	0.0000	4	0.3145	0.0015	10.74	4	0.3145	0.0015

Total Height - 12 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
10	0.0497	0.0000	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0000	0.0643		0	0.0000	3	0.0603	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0000	0.0866		0	0.0000	3	0.0805	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0000	0.1116		0	0.0000	3	0.1034	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.0000	0.1392		0	0.0000	3	0.1289	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.0000	0.1694		0	0.0000	3	0.1568	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.0000	0.2021		0	0.0000	3	0.1872	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.0000	0.2373		0	0.0000	4	0.2371	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.0000	0.2750		0	0.0000	4	0.2746	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.0086	0.3151	0.42	0	0.0000	4	0.3145	0.0015	10.74	4	0.3145	0.0015

Total Height - 12 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
10	0.0497	0.0000	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0000	0.0643		0	0.0000	3	0.0603	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0000	0.0866		0	0.0000	3	0.0805	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0000	0.1116		0	0.0000	3	0.1034	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.0000	0.1392		0	0.0000	3	0.1289	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.0000	0.1694		0	0.0000	3	0.1568	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.0000	0.2021		0	0.0000	3	0.1872	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.0000	0.2373		0	0.0000	4	0.2371	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.0000	0.2750		0	0.0000	4	0.2746	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.0000	0.3151		0	0.0000	4	0.3145	0.0015	10.74	4	0.3145	0.0015

Jack Pine Sawlog and Pulp Volume Estimates

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0577	0.0027	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
12	0.0813	0.0453	0.0755	5.09	1	0.0261	3	0.0483	0.0032	10.94	4	0.0744	0.0032
14	0.1085	0.0819	0.1016	7.35	2	0.0641	2	0.0352	0.0042	11.37	4	0.0992	0.0042
16	0.1391	0.1154	0.1308	8.46	3	0.1108	1	0.0164	0.0052	11.67	4	0.1272	0.0052
18	0.1730	0.1501	0.1630	9.18	3	0.1383	1	0.0199	0.0063	11.90	4	0.1582	0.0063
20	0.2102	0.1869	0.1982	9.70	3	0.1684	1	0.0237	0.0074	12.09	4	0.1921	0.0074
22	0.2505	0.2262	0.2363	10.10	3	0.2012	1	0.0277	0.0086	12.24	4	0.2289	0.0086
24	0.2940	0.2681	0.2772	10.42	3	0.2366	1	0.0319	0.0099	12.36	4	0.2684	0.0099
26	0.3405	0.3125	0.3209	10.68	4	0.3107	0	0.0000	0.0112	12.46	4	0.3107	0.0112
28	0.3900	0.3595	0.3673	10.89	4	0.3557	0	0.0000	0.0125	12.55	4	0.3557	0.0125
30	0.4425	0.4091	0.4164	11.06	4	0.4034	0	0.0000	0.0139	12.63	4	0.4034	0.0139
32	0.4980	0.4613	0.4681	11.24	4	0.4536	0	0.0000	0.0154	12.70	4	0.4536	0.0154
34	0.5564	0.5161	0.5225	11.38	4	0.5065	0	0.0000	0.0169	12.76	4	0.5065	0.0169
36	0.6176	0.5733	0.5794	11.50	4	0.5618	0	0.0000	0.0184	12.81	4	0.5618	0.0184
38	0.6818	0.6332	0.6390	11.61	4	0.6198	0	0.0000	0.0200	12.86	4	0.6198	0.0200
40	0.7488	0.6955	0.7010	11.71	4	0.6802	0	0.0000	0.0216	12.91	4	0.6802	0.0216
42	0.8186	0.7603	0.7656	11.80	4	0.7431	0	0.0000	0.0232	12.95	4	0.7431	0.0232
44	0.8913	0.8276	0.8327	11.88	4	0.8085	0	0.0000	0.0249	12.98	4	0.8085	0.0249
46	0.9668	0.8974	0.9023	11.96	4	0.8763	1	0.0259	0.0007	13.02	5	0.9023	0.0007
48	1.0452	0.9696	0.9744	12.03	4	0.9466	1	0.0277	0.0007	13.05	5	0.9742	0.0007
50	1.1263	1.0443	1.0489	12.09	4	1.0193	1	0.0294	0.0008	13.08	5	1.0487	0.0008
52	1.2102	1.1215	1.1259	12.15	4	1.0944	1	0.0312	0.0008	13.11	5	1.1256	0.0008
54	1.2970	1.2010	1.2053	12.21	4	1.1720	1	0.0330	0.0009	13.13	5	1.2050	0.0009

Total Height - 14 m | **Stump Height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0577	0.0000	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
12	0.0813	0.0000	0.0755		0	0.0000	4	0.0744	0.0032	10.94	4	0.0744	0.0032
14	0.1085	0.0000	0.1016		0	0.0000	4	0.0992	0.0042	11.37	4	0.0992	0.0042
16	0.1391	0.0275	0.1308	1.71	0	0.0000	4	0.1272	0.0052	11.67	4	0.1272	0.0052
18	0.1730	0.0851	0.1630	4.26	1	0.0585	3	0.0996	0.0063	11.90	4	0.1582	0.0063
20	0.2102	0.1397	0.1982	6.05	2	0.1273	2	0.0648	0.0074	12.09	4	0.1921	0.0074
22	0.2505	0.1882	0.2363	7.13	2	0.1528	2	0.0760	0.0086	12.24	4	0.2289	0.0086
24	0.2940	0.2357	0.2772	7.87	2	0.1805	2	0.0879	0.0099	12.36	4	0.2684	0.0099
26	0.3405	0.2840	0.3209	8.43	3	0.2745	1	0.0362	0.0112	12.46	4	0.3107	0.0112
28	0.3900	0.3339	0.3673	8.87	3	0.3149	1	0.0408	0.0125	12.55	4	0.3557	0.0125
30	0.4425	0.3858	0.4164	9.23	3	0.3578	1	0.0455	0.0139	12.63	4	0.4034	0.0139
32	0.4980	0.4398	0.4681	9.53	3	0.4032	1	0.0504	0.0154	12.70	4	0.4536	0.0154
34	0.5564	0.4960	0.5225	9.78	3	0.4510	1	0.0555	0.0169	12.76	4	0.5065	0.0169
36	0.6176	0.5546	0.5794	10.01	3	0.5011	1	0.0607	0.0184	12.81	4	0.5618	0.0184
38	0.6818	0.6155	0.6390	10.20	3	0.5537	1	0.0661	0.0200	12.86	4	0.6198	0.0200
40	0.7488	0.6787	0.7010	10.38	3	0.6086	1	0.0716	0.0216	12.91	4	0.6802	0.0216
42	0.8186	0.7444	0.7656	10.53	4	0.7431	0	0.0000	0.0232	12.95	4	0.7431	0.0232
44	0.8913	0.8124	0.8327	10.67	4	0.8085	0	0.0000	0.0249	12.98	4	0.8085	0.0249
46	0.9668	0.8828	0.9023	10.80	4	0.8763	1	0.0259	0.0007	13.02	5	0.9023	0.0007
48	1.0452	0.9557	0.9744	10.91	4	0.9466	1	0.0277	0.0007	13.05	5	0.9742	0.0007
50	1.1263	1.0309	1.0489	11.02	4	1.0193	1	0.0294	0.0008	13.08	5	1.0487	0.0008
52	1.2102	1.1085	1.1259	11.12	4	1.0944	1	0.0312	0.0008	13.11	5	1.1256	0.0008
54	1.2970	1.1885	1.2053	11.21	4	1.1720	1	0.0330	0.0009	13.13	5	1.2050	0.0009

Jack Pine Sawlog and Pulp Volume Estimates

12 metre

Total Height - 12 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

					Sawlog, Pulp & Unmerchantable Volume					Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0497	0.0000	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0000	0.0643		0	0.0000	3	0.0603	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0000	0.0866		0	0.0000	3	0.0805	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0000	0.1116		0	0.0000	3	0.1034	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.0000	0.1392		0	0.0000	3	0.1289	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.0000	0.1694		0	0.0000	3	0.1568	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.0000	0.2021		0	0.0000	3	0.1872	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.0135	0.2373	0.57	0	0.0000	4	0.2371	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.0548	0.2750	1.29	0	0.0000	4	0.2746	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.1065	0.3151	2.10	0	0.0000	4	0.3145	0.0015	10.74	4	0.3145	0.0015

Total Height - 12 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

					Sawlog, Pulp & Unmerchantable Volume					Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0497	0.0000	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0000	0.0643		0	0.0000	3	0.0603	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0000	0.0866		0	0.0000	3	0.0805	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0000	0.1116		0	0.0000	3	0.1034	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.0000	0.1392		0	0.0000	3	0.1289	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.0000	0.1694		0	0.0000	3	0.1568	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.0000	0.2021		0	0.0000	3	0.1872	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.0000	0.2373		0	0.0000	4	0.2371	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.0000	0.2750		0	0.0000	4	0.2746	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.0086	0.3151	0.42	0	0.0000	4	0.3145	0.0015	10.74	4	0.3145	0.0015

Total Height - 12 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

					Sawlog, Pulp & Unmerchantable Volume					Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0497	0.0000	0.0447		0	0.0000	3	0.0427	0.0044	8.78	3	0.0427	0.0044
12	0.0700	0.0000	0.0643		0	0.0000	3	0.0603	0.0060	9.33	3	0.0603	0.0060
14	0.0935	0.0000	0.0866		0	0.0000	3	0.0805	0.0077	9.70	3	0.0805	0.0077
16	0.1200	0.0000	0.1116		0	0.0000	3	0.1034	0.0096	9.97	3	0.1034	0.0096
18	0.1494	0.0000	0.1392		0	0.0000	3	0.1289	0.0116	10.17	3	0.1289	0.0116
20	0.1817	0.0000	0.1694		0	0.0000	3	0.1568	0.0137	10.33	3	0.1568	0.0137
22	0.2168	0.0000	0.2021		0	0.0000	3	0.1872	0.0160	10.46	3	0.1872	0.0160
24	0.2548	0.0000	0.2373		0	0.0000	4	0.2371	0.0012	10.57	4	0.2371	0.0012
26	0.2955	0.0000	0.2750		0	0.0000	4	0.2746	0.0014	10.66	4	0.2746	0.0014
28	0.3390	0.0000	0.3151		0	0.0000	4	0.3145	0.0015	10.74	4	0.3145	0.0015

Jack Pine Sawlog and Pulp Volume Estimates

14 metre

Total Height - 14 m				Sawlog Upper Diameter - 10 cm						Stump height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper bark (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0577	0.0027	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
12	0.0813	0.0453	0.0755	5.09	1	0.0261	3	0.0483	0.0032	10.94	4	0.0744	0.0032
14	0.1085	0.0819	0.1016	7.35	2	0.0641	2	0.0352	0.0042	11.37	4	0.0992	0.0042
16	0.1391	0.1154	0.1308	8.46	3	0.1108	1	0.0164	0.0052	11.67	4	0.1272	0.0052
18	0.1730	0.1501	0.1630	9.18	3	0.1383	1	0.0199	0.0063	11.90	4	0.1582	0.0063
20	0.2102	0.1869	0.1982	9.70	3	0.1684	1	0.0237	0.0074	12.09	4	0.1921	0.0074
22	0.2505	0.2262	0.2363	10.10	3	0.2012	1	0.0277	0.0086	12.24	4	0.2289	0.0086
24	0.2940	0.2681	0.2772	10.42	3	0.2366	1	0.0319	0.0099	12.36	4	0.2684	0.0099
26	0.3405	0.3125	0.3209	10.68	4	0.3107	0	0.0000	0.0112	12.46	4	0.3107	0.0112
28	0.3900	0.3595	0.3673	10.89	4	0.3557	0	0.0000	0.0125	12.55	4	0.3557	0.0125
30	0.4425	0.4091	0.4164	11.08	4	0.4034	0	0.0000	0.0139	12.63	4	0.4034	0.0139
32	0.4980	0.4613	0.4681	11.24	4	0.4536	0	0.0000	0.0154	12.70	4	0.4536	0.0154
34	0.5564	0.5161	0.5225	11.38	4	0.5065	0	0.0000	0.0169	12.76	4	0.5065	0.0169
36	0.6176	0.5733	0.5794	11.50	4	0.5618	0	0.0000	0.0184	12.81	4	0.5618	0.0184
38	0.6818	0.6332	0.6390	11.61	4	0.6198	0	0.0000	0.0200	12.86	4	0.6198	0.0200
40	0.7488	0.6955	0.7010	11.71	4	0.6802	0	0.0000	0.0216	12.91	4	0.6802	0.0216
42	0.8186	0.7603	0.7656	11.80	4	0.7431	0	0.0000	0.0232	12.95	4	0.7431	0.0232
44	0.8913	0.8276	0.8327	11.88	4	0.8085	0	0.0000	0.0249	12.98	4	0.8085	0.0249
46	0.9668	0.8974	0.9023	11.96	4	0.8763	1	0.0259	0.0007	13.02	5	0.9023	0.0007
48	1.0452	0.9696	0.9744	12.03	4	0.9466	1	0.0277	0.0007	13.05	5	0.9742	0.0007
50	1.1263	1.0443	1.0489	12.09	4	1.0193	1	0.0294	0.0008	13.08	5	1.0487	0.0008
52	1.2102	1.1215	1.1259	12.15	4	1.0944	1	0.0312	0.0008	13.11	5	1.1256	0.0008
54	1.2970	1.2010	1.2053	12.21	4	1.1720	1	0.0330	0.0009	13.13	5	1.2050	0.0009

Total Height - 14 m				Sawlog Upper Diameter - 15 cm						Stump height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper bark (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0577	0.0000	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
12	0.0813	0.0000	0.0755		0	0.0000	4	0.0744	0.0032	10.94	4	0.0744	0.0032
14	0.1085	0.0000	0.1016		0	0.0000	4	0.0992	0.0042	11.37	4	0.0992	0.0042
16	0.1391	0.0275	0.1308	1.71	0	0.0000	4	0.1272	0.0052	11.67	4	0.1272	0.0052
18	0.1730	0.0851	0.1630	4.26	1	0.0585	3	0.0996	0.0063	11.90	4	0.1582	0.0063
20	0.2102	0.1397	0.1982	6.05	2	0.1273	2	0.0648	0.0074	12.09	4	0.1921	0.0074
22	0.2505	0.1882	0.2363	7.13	2	0.1528	2	0.0760	0.0086	12.24	4	0.2289	0.0086
24	0.2940	0.2357	0.2772	7.87	2	0.1805	2	0.0879	0.0099	12.36	4	0.2684	0.0099
26	0.3405	0.2840	0.3209	8.43	3	0.2745	1	0.0362	0.0112	12.46	4	0.3107	0.0112
28	0.3900	0.3339	0.3673	8.87	3	0.3149	1	0.0408	0.0125	12.55	4	0.3557	0.0125
30	0.4425	0.3858	0.4164	9.23	3	0.3578	1	0.0455	0.0139	12.63	4	0.4034	0.0139
32	0.4980	0.4398	0.4681	9.53	3	0.4032	1	0.0504	0.0154	12.70	4	0.4536	0.0154
34	0.5564	0.4960	0.5225	9.78	3	0.4510	1	0.0555	0.0169	12.76	4	0.5065	0.0169
36	0.6176	0.5546	0.5794	10.01	3	0.5011	1	0.0607	0.0184	12.81	4	0.5618	0.0184
38	0.6818	0.6155	0.6390	10.20	3	0.5537	1	0.0661	0.0200	12.86	4	0.6198	0.0200
40	0.7488	0.6787	0.7010	10.38	3	0.6086	1	0.0716	0.0216	12.91	4	0.6802	0.0216
42	0.8186	0.7444	0.7656	10.53	4	0.7431	0	0.0000	0.0232	12.95	4	0.7431	0.0232
44	0.8913	0.8124	0.8327	10.67	4	0.8085	0	0.0000	0.0249	12.98	4	0.8085	0.0249
46	0.9668	0.8828	0.9023	10.80	4	0.8763	1	0.0259	0.0007	13.02	5	0.9023	0.0007
48	1.0452	0.9557	0.9744	10.91	4	0.9466	1	0.0277	0.0007	13.05	5	0.9742	0.0007
50	1.1263	1.0309	1.0489	11.02	4	1.0193	1	0.0294	0.0008	13.08	5	1.0487	0.0008
52	1.2102	1.1085	1.1259	11.12	4	1.0944	1	0.0312	0.0008	13.11	5	1.1256	0.0008
54	1.2970	1.1885	1.2053	11.21	4	1.1720	1	0.0330	0.0009	13.13	5	1.2050	0.0009

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0577	0.0000	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
0.0813	0.0000	0.0755		0	0.0000	4	0.0744	0.0032	10.94	4	0.0744	0.0032
0.1085	0.0000	0.1016		0	0.0000	4	0.0992	0.0042	11.37	4	0.0992	0.0042
0.1391	0.0000	0.1308		0	0.0000	4	0.1272	0.0052	11.67	4	0.1272	0.0052
0.1730	0.0000	0.1630		0	0.0000	4	0.1582	0.0063	11.90	4	0.1582	0.0063
0.2102	0.0163	0.1982	0.80	0	0.0000	4	0.1921	0.0074	12.09	4	0.1921	0.0074
0.2505	0.0658	0.2363	2.13	0	0.0000	4	0.2289	0.0086	12.24	4	0.2289	0.0086
0.2940	0.1320	0.2772	3.70	1	0.1037	3	0.1647	0.0099	12.36	4	0.2684	0.0099
0.3405	0.2007	0.3209	5.07	1	0.1216	3	0.1891	0.0112	12.46	4	0.3107	0.0112
0.3900	0.2646	0.3673	6.06	2	0.2422	2	0.1135	0.0125	12.55	4	0.3557	0.0125
0.4425	0.3260	0.4164	6.80	2	0.2763	2	0.1271	0.0139	12.63	4	0.4034	0.0139
0.4980	0.3868	0.4681	7.37	2	0.3124	2	0.1412	0.0154	12.70	4	0.4536	0.0154
0.5564	0.4482	0.5225	7.83	2	0.3506	2	0.1559	0.0169	12.76	4	0.5065	0.0169
0.6176	0.5108	0.5794	8.22	3	0.5011	1	0.0607	0.0184	12.81	4	0.5618	0.0184
0.6818	0.5749	0.6390	8.54	3	0.5537	1	0.0661	0.0200	12.86	4	0.6198	0.0200
0.7488	0.6409	0.7010	8.83	3	0.6086	1	0.0716	0.0216	12.91	4	0.6802	0.0216
0.8186	0.7089	0.7656	9.08	3	0.6658	1	0.0773	0.0232	12.95	4	0.7431	0.0232
0.8913	0.7789	0.8327	9.30	3	0.7254	1	0.0831	0.0249	12.98	4	0.8085	0.0249
0.9668	0.8511	0.9023	9.49	3	0.7873	2	0.1150	0.0007	13.02	5	0.9023	0.0007
1.0452	0.9254	0.9744	9.67	3	0.8515	2	0.1228	0.0007	13.05	5	0.9742	0.0007
1.1263	1.0020	1.0489	9.83	3	0.9180	2	0.1307	0.0008	13.08	5	1.0487	0.0008
1.2102	1.0808	1.1259	9.96	3	0.9867	2	0.1389	0.0008	13.11	5	1.1256	0.0008
1.2970	1.1620	1.2053	10.12	3	1.0578	2	0.1472	0.0009	13.13	5	1.2050	0.0009

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0577	0.0000	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
0.0813	0.0000	0.0755		0	0.0000	4	0.0744	0.0032	10.94	4	0.0744	0.0032
0.1085	0.0000	0.1016		0	0.0000	4	0.0992	0.0042	11.37	4	0.0992	0.0042
0.1391	0.0000	0.1308		0	0.0000	4	0.1272	0.0052	11.67	4	0.1272	0.0052
0.1730	0.0000	0.1630		0	0.0000	4	0.1582	0.0063	11.90	4	0.1582	0.0063
0.2102	0.0000	0.1982		0	0.0000	4	0.1921	0.0074	12.09	4	0.1921	0.0074
0.2505	0.0000	0.2363		0	0.0000	4	0.2289	0.0086	12.24	4	0.2289	0.0086
0.2940	0.0066	0.2772	0.43	0	0.0000	4	0.2684	0.0099	12.36	4	0.2684	0.0099
0.3405	0.0536	0.3209	1.29	0	0.0000	4	0.3107	0.0112	12.46	4	0.3107	0.0112
0.3900	0.1139	0.3673	2.27	0	0.0000	4	0.3557	0.0125	12.55	4	0.3557	0.0125
0.4425	0.1866	0.4164	3.33	1	0.1617	3	0.2417	0.0139	12.63	4	0.4034	0.0139
0.4980	0.2649	0.4681	4.35	1	0.1838	3	0.2698	0.0154	12.70	4	0.4536	0.0154
0.5564	0.3422	0.5225	5.21	1	0.2073	3	0.2991	0.0169	12.76	4	0.5065	0.0169
0.6176	0.4173	0.5794	5.90	2	0.3908	2	0.1710	0.0184	12.81	4	0.5618	0.0184
0.6818	0.4912	0.6390	6.47	2	0.4331	2	0.1867	0.0200	12.86	4	0.6198	0.0200
0.7488	0.5648	0.7010	6.94	2	0.4774	2	0.2028	0.0216	12.91	4	0.6802	0.0216
0.8186	0.6389	0.7656	7.34	2	0.5237	2	0.2194	0.0232	12.95	4	0.7431	0.0232
0.8913	0.7139	0.8327	7.68	2	0.5721	2	0.2364	0.0249	12.98	4	0.8085	0.0249
0.9668	0.7903	0.9023	7.96	3	0.7873	2	0.1150	0.0007	13.02	5	0.9023	0.0007
1.0452	0.8683	0.9744	8.25	3	0.8515	2	0.1228	0.0007	13.05	5	0.9742	0.0007
1.1263	0.9480	1.0489	8.49	3	0.9180	2	0.1307	0.0008	13.08	5	1.0487	0.0008
1.2102	1.0296	1.1259	8.70	3	0.9867	2	0.1389	0.0008	13.11	5	1.1256	0.0008
1.2970	1.1131	1.2053	8.90	3	1.0578	2	0.1472	0.0009	13.13	5	1.2050	0.0009

Jack Pine Sawlog and Pulp Volume Estimates

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0577	0.0000	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
11	0.0813	0.0000	0.0755		0	0.0000	4	0.0744	0.0032	10.94	4	0.0744	0.0032
12	0.1085	0.0000	0.1016		0	0.0000	4	0.0992	0.0042	11.37	4	0.0992	0.0042
13	0.1391	0.0000	0.1308		0	0.0000	4	0.1272	0.0052	11.67	4	0.1272	0.0052
14	0.1730	0.0000	0.1630		0	0.0000	4	0.1582	0.0063	11.90	4	0.1582	0.0063
15	0.2102	0.0000	0.1982		0	0.0000	4	0.1921	0.0074	12.09	4	0.1921	0.0074
16	0.2505	0.0000	0.2363		0	0.0000	4	0.2289	0.0086	12.24	4	0.2289	0.0086
17	0.2940	0.0000	0.2772		0	0.0000	4	0.2684	0.0099	12.36	4	0.2684	0.0099
18	0.3405	0.0000	0.3209		0	0.0000	4	0.3107	0.0112	12.46	4	0.3107	0.0112
19	0.3900	0.0000	0.3673		0	0.0000	4	0.3557	0.0125	12.55	4	0.3557	0.0125
20	0.4425	0.0447	0.4164	0.89	0	0.0000	4	0.4034	0.0139	12.63	4	0.4034	0.0139
21	0.4980	0.1024	0.4681	1.57	0	0.0000	4	0.4536	0.0154	12.70	4	0.4536	0.0154
22	0.5564	0.1710	0.5225	2.31	0	0.0000	4	0.5065	0.0169	12.76	4	0.5065	0.0169
23	0.6176	0.2495	0.5794	3.08	1	0.2323	3	0.3295	0.0184	12.81	4	0.5618	0.0184
24	0.6818	0.3345	0.6390	3.84	1	0.2587	3	0.3611	0.0200	12.86	4	0.6198	0.0200
25	0.7488	0.4218	0.7010	4.55	1	0.2665	3	0.3937	0.0216	12.91	4	0.6802	0.0216
26	0.8186	0.5089	0.7656	5.17	1	0.3157	3	0.4274	0.0232	12.95	4	0.7431	0.0232
27	0.8913	0.5954	0.8327	5.70	2	0.5721	2	0.2364	0.0249	12.98	4	0.8085	0.0249
28	0.9668	0.6814	0.9023	6.16	2	0.6224	3	0.2798	0.0007	13.02	5	0.9023	0.0007
29	1.0452	0.7674	0.9744	6.56	2	0.6748	3	0.2995	0.0007	13.05	5	0.9742	0.0007
30	1.1263	0.8539	1.0489	6.92	2	0.7292	3	0.3196	0.0008	13.08	5	1.0487	0.0008
31	1.2102	0.9413	1.1259	7.23	2	0.7855	3	0.3401	0.0008	13.11	5	1.1256	0.0008
32	1.2970	1.0299	1.2053	7.51	2	0.8438	3	0.3612	0.0009	13.13	5	1.2050	0.0009

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0577	0.0000	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
11	0.0813	0.0000	0.0755		0	0.0000	4	0.0744	0.0032	10.94	4	0.0744	0.0032
12	0.1085	0.0000	0.1016		0	0.0000	4	0.0992	0.0042	11.37	4	0.0992	0.0042
13	0.1391	0.0000	0.1308		0	0.0000	4	0.1272	0.0052	11.67	4	0.1272	0.0052
14	0.1730	0.0000	0.1630		0	0.0000	4	0.1582	0.0063	11.90	4	0.1582	0.0063
15	0.2102	0.0000	0.1982		0	0.0000	4	0.1921	0.0074	12.09	4	0.1921	0.0074
16	0.2505	0.0000	0.2363		0	0.0000	4	0.2289	0.0086	12.24	4	0.2289	0.0086
17	0.2940	0.0000	0.2772		0	0.0000	4	0.2684	0.0099	12.36	4	0.2684	0.0099
18	0.3405	0.0000	0.3209		0	0.0000	4	0.3107	0.0112	12.46	4	0.3107	0.0112
19	0.3900	0.0000	0.3673		0	0.0000	4	0.3557	0.0125	12.55	4	0.3557	0.0125
20	0.4425	0.0000	0.4164		0	0.0000	4	0.4034	0.0139	12.63	4	0.4034	0.0139
21	0.4980	0.0000	0.4681		0	0.0000	4	0.4536	0.0154	12.70	4	0.4536	0.0154
22	0.5564	0.0370	0.5225	0.67	0	0.0000	4	0.5065	0.0169	12.76	4	0.5065	0.0169
23	0.6176	0.0948	0.5794	1.19	0	0.0000	4	0.5618	0.0184	12.81	4	0.5618	0.0184
24	0.6818	0.1613	0.6390	1.73	0	0.0000	4	0.6198	0.0200	12.86	4	0.6198	0.0200
25	0.7488	0.2370	0.7010	2.30	0	0.0000	4	0.6802	0.0216	12.91	4	0.6802	0.0216
26	0.8186	0.3209	0.7656	2.89	1	0.3157	3	0.4274	0.0232	12.95	4	0.7431	0.0232
27	0.8913	0.4115	0.8327	3.49	1	0.3464	3	0.4621	0.0249	12.98	4	0.8085	0.0249
28	0.9668	0.5061	0.9023	4.06	1	0.3784	1	0.5238	0.0007	13.02	5	0.9023	0.0007
29	1.0452	0.6028	0.9744	4.59	1	0.4119	4	0.5624	0.0007	13.05	5	0.9742	0.0007
30	1.1263	0.7001	1.0489	5.07	1	0.4468	4	0.6019	0.0008	13.08	5	1.0487	0.0008
31	1.2102	0.7976	1.1259	5.50	2	0.7855	3	0.3401	0.0008	13.11	5	1.1256	0.0008
32	1.2970	0.8953	1.2053	5.89	2	0.8438	3	0.3612	0.0009	13.13	5	1.2050	0.0009

Jack Pine Sawlog and Pulp Volume Estimates

14 metre

Total Height - 14 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0577	0.0000	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
12	0.0813	0.0000	0.0755		0	0.0000	4	0.0744	0.0032	10.94	4	0.0744	0.0032
14	0.1085	0.0000	0.1016		0	0.0000	4	0.0992	0.0042	11.37	4	0.0992	0.0042
16	0.1391	0.0000	0.1308		0	0.0000	4	0.1272	0.0052	11.67	4	0.1272	0.0052
18	0.1730	0.0000	0.1630		0	0.0000	4	0.1582	0.0063	11.90	4	0.1582	0.0063
20	0.2102	0.0163	0.1982	0.80	0	0.0000	4	0.1921	0.0074	12.09	4	0.1921	0.0074
22	0.2505	0.0658	0.2363	2.13	0	0.0000	4	0.2289	0.0086	12.24	4	0.2289	0.0086
24	0.2940	0.1320	0.2772	3.70	1	0.1037	3	0.1647	0.0099	12.36	4	0.2684	0.0099
26	0.3405	0.2007	0.3209	5.07	1	0.1216	3	0.1891	0.0112	12.46	4	0.3107	0.0112
28	0.3900	0.2646	0.3673	6.06	2	0.2422	2	0.1135	0.0125	12.55	4	0.3557	0.0125
30	0.4425	0.3260	0.4164	6.80	2	0.2763	2	0.1271	0.0139	12.63	4	0.4034	0.0139
32	0.4980	0.3868	0.4681	7.37	2	0.3124	2	0.1412	0.0154	12.70	4	0.4536	0.0154
34	0.5564	0.4482	0.5225	7.83	2	0.3506	2	0.1559	0.0169	12.76	4	0.5065	0.0169
36	0.6176	0.5108	0.5794	8.22	2	0.5011	1	0.0607	0.0184	12.81	4	0.5618	0.0184
38	0.6818	0.5749	0.6390	8.54	3	0.5537	1	0.0661	0.0200	12.86	4	0.6198	0.0200
40	0.7488	0.6409	0.7010	8.83	3	0.6086	1	0.0716	0.0216	12.91	4	0.6802	0.0216
42	0.8186	0.7089	0.7656	9.08	3	0.6658	1	0.0773	0.0232	12.95	4	0.7431	0.0232
44	0.8913	0.7789	0.8327	9.30	3	0.7254	1	0.0831	0.0249	12.98	4	0.8085	0.0249
46	0.9668	0.8511	0.9023	9.49	3	0.7873	2	0.1150	0.0007	13.02	5	0.9023	0.0007
48	1.0452	0.9254	0.9744	9.67	3	0.8515	2	0.1228	0.0007	13.05	5	0.9742	0.0007
50	1.1263	1.0020	1.0489	9.83	3	0.9180	2	0.1307	0.0008	13.08	5	1.0487	0.0008
52	1.2102	1.0808	1.1259	9.98	3	0.9867	2	0.1389	0.0008	13.11	5	1.1256	0.0008
54	1.2970	1.1620	1.2053	10.12	3	1.0578	2	0.1472	0.0009	13.13	5	1.2050	0.0009

Total Height - 14 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0577	0.0000	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
12	0.0813	0.0000	0.0755		0	0.0000	4	0.0744	0.0032	10.94	4	0.0744	0.0032
14	0.1085	0.0000	0.1016		0	0.0000	4	0.0992	0.0042	11.37	4	0.0992	0.0042
16	0.1391	0.0000	0.1308		0	0.0000	4	0.1272	0.0052	11.67	4	0.1272	0.0052
18	0.1730	0.0000	0.1630		0	0.0000	4	0.1582	0.0063	11.90	4	0.1582	0.0063
20	0.2102	0.0000	0.1982		0	0.0000	4	0.1921	0.0074	12.09	4	0.1921	0.0074
22	0.2505	0.0000	0.2363		0	0.0000	4	0.2289	0.0086	12.24	4	0.2289	0.0086
24	0.2940	0.0066	0.2772	0.43	0	0.0000	4	0.2684	0.0099	12.36	4	0.2684	0.0099
26	0.3405	0.0536	0.3209	1.29	0	0.0000	4	0.3107	0.0112	12.46	4	0.3107	0.0112
28	0.3900	0.1139	0.3673	2.27	0	0.0000	4	0.3557	0.0125	12.55	4	0.3557	0.0125
30	0.4425	0.1866	0.4164	3.33	1	0.1617	3	0.2417	0.0139	12.63	4	0.4034	0.0139
32	0.4980	0.2649	0.4681	4.35	1	0.1838	3	0.2698	0.0154	12.70	4	0.4536	0.0154
34	0.5564	0.3422	0.5225	5.21	1	0.2073	3	0.2991	0.0169	12.76	4	0.5065	0.0169
36	0.6176	0.4173	0.5794	5.90	2	0.3908	2	0.1710	0.0184	12.81	4	0.5618	0.0184
38	0.6818	0.4912	0.6390	6.47	2	0.4331	2	0.1867	0.0200	12.86	4	0.6198	0.0200
40	0.7488	0.5648	0.7010	6.94	2	0.4774	2	0.2028	0.0216	12.91	4	0.6802	0.0216
42	0.8186	0.6389	0.7656	7.34	2	0.5237	2	0.2194	0.0232	12.95	4	0.7431	0.0232
44	0.8913	0.7139	0.8327	7.68	2	0.5721	2	0.2364	0.0249	12.98	4	0.8085	0.0249
46	0.9668	0.7903	0.9023	7.96	3	0.7873	2	0.1150	0.0007	13.02	5	0.9023	0.0007
48	1.0452	0.8683	0.9744	8.25	3	0.8515	2	0.1228	0.0007	13.05	5	0.9742	0.0007
50	1.1263	0.9480	1.0489	8.49	3	0.9180	2	0.1307	0.0008	13.08	5	1.0487	0.0008
52	1.2102	1.0296	1.1259	8.70	3	0.9867	2	0.1389	0.0008	13.11	5	1.1256	0.0008
54	1.2970	1.1131	1.2053	8.90	3	1.0578	2	0.1472	0.0009	13.13	5	1.2050	0.0009

Jack Pine Sawlog and Pulp Volume Estimates

14 metre

Total Height - 14 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	35 cm upper (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0577	0.0000	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
12	0.0813	0.0000	0.0755		0	0.0000	4	0.0744	0.0032	10.94	4	0.0744	0.0032
14	0.1085	0.0000	0.1016		0	0.0000	4	0.0992	0.0042	11.37	4	0.0992	0.0042
16	0.1391	0.0000	0.1308		0	0.0000	4	0.1272	0.0052	11.67	4	0.1272	0.0052
18	0.1730	0.0000	0.1630		0	0.0000	4	0.1582	0.0063	11.90	4	0.1582	0.0063
20	0.2102	0.0000	0.1982		0	0.0000	4	0.1921	0.0074	12.09	4	0.1921	0.0074
22	0.2505	0.0000	0.2363		0	0.0000	4	0.2289	0.0086	12.24	4	0.2289	0.0086
24	0.2940	0.0000	0.2772		0	0.0000	4	0.2684	0.0099	12.36	4	0.2684	0.0099
26	0.3405	0.0000	0.3209		0	0.0000	4	0.3107	0.0112	12.46	4	0.3107	0.0112
28	0.3900	0.0000	0.3673		0	0.0000	4	0.3557	0.0125	12.55	4	0.3557	0.0125
30	0.4425	0.0447	0.4164	0.89	0	0.0000	4	0.4034	0.0139	12.63	4	0.4034	0.0139
32	0.4980	0.1024	0.4681	1.57	0	0.0000	4	0.4536	0.0154	12.70	4	0.4536	0.0154
34	0.5564	0.1710	0.5225	2.31	0	0.0000	4	0.5065	0.0169	12.76	4	0.5065	0.0169
36	0.6176	0.2495	0.5794	3.08	1	0.2323	3	0.3295	0.0184	12.81	4	0.5618	0.0184
38	0.6818	0.3345	0.6390	3.84	1	0.2587	3	0.3611	0.0200	12.86	4	0.6198	0.0200
40	0.7488	0.4218	0.7010	4.55	1	0.2865	3	0.3937	0.0216	12.91	4	0.6802	0.0216
42	0.8186	0.5089	0.7656	5.17	1	0.3157	3	0.4274	0.0232	12.95	4	0.7431	0.0232
44	0.8913	0.5954	0.8327	5.70	2	0.5721	2	0.2364	0.0249	12.98	4	0.8085	0.0249
46	0.9668	0.6814	0.9023	6.16	2	0.5224	3	0.2798	0.0007	13.02	5	0.9023	0.0007
48	1.0452	0.7674	0.9744	6.56	2	0.5748	3	0.2996	0.0007	13.05	5	0.9742	0.0007
50	1.1263	0.8539	1.0489	6.92	2	0.7292	3	0.3196	0.0008	13.08	5	1.0487	0.0008
52	1.2102	0.9413	1.1259	7.23	2	0.7855	3	0.3401	0.0008	13.11	5	1.1256	0.0008
54	1.2970	1.0299	1.2053	7.51	2	0.8438	3	0.3612	0.0009	13.13	5	1.2050	0.0009

Total Height - 14 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	35 cm upper (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0577	0.0000	0.0525		0	0.0000	3	0.0455	0.0097	10.30	3	0.0455	0.0097
12	0.0813	0.0000	0.0755		0	0.0000	4	0.0744	0.0032	10.94	4	0.0744	0.0032
14	0.1085	0.0000	0.1016		0	0.0000	4	0.0992	0.0042	11.37	4	0.0992	0.0042
16	0.1391	0.0000	0.1308		0	0.0000	4	0.1272	0.0052	11.67	4	0.1272	0.0052
18	0.1730	0.0000	0.1630		0	0.0000	4	0.1582	0.0063	11.90	4	0.1582	0.0063
20	0.2102	0.0000	0.1982		0	0.0000	4	0.1921	0.0074	12.09	4	0.1921	0.0074
22	0.2505	0.0000	0.2363		0	0.0000	4	0.2289	0.0086	12.24	4	0.2289	0.0086
24	0.2940	0.0000	0.2772		0	0.0000	4	0.2684	0.0099	12.36	4	0.2684	0.0099
26	0.3405	0.0000	0.3209		0	0.0000	4	0.3107	0.0112	12.46	4	0.3107	0.0112
28	0.3900	0.0000	0.3673		0	0.0000	4	0.3557	0.0125	12.55	4	0.3557	0.0125
30	0.4425	0.0000	0.4164		0	0.0000	4	0.4034	0.0139	12.63	4	0.4034	0.0139
32	0.4980	0.0000	0.4681		0	0.0000	4	0.4536	0.0154	12.70	4	0.4536	0.0154
34	0.5564	0.0370	0.5225	0.67	0	0.0000	4	0.5065	0.0169	12.76	4	0.5065	0.0169
36	0.6176	0.0948	0.5794	1.19	0	0.0000	4	0.5618	0.0184	12.81	4	0.5618	0.0184
38	0.6818	0.1613	0.6390	1.73	0	0.0000	4	0.6198	0.0200	12.86	4	0.6198	0.0200
40	0.7488	0.2370	0.7010	2.30	0	0.0000	4	0.6802	0.0216	12.91	4	0.6802	0.0216
42	0.8186	0.3209	0.7656	2.89	1	0.3157	3	0.4274	0.0232	12.95	4	0.7431	0.0232
44	0.8913	0.4115	0.8327	3.49	1	0.3464	3	0.4621	0.0249	12.98	4	0.8085	0.0249
46	0.9668	0.5061	0.9023	4.06	1	0.3784	4	0.5238	0.0007	13.02	5	0.9023	0.0007
48	1.0452	0.6028	0.9744	4.59	1	0.4119	4	0.5624	0.0007	13.05	5	0.9742	0.0007
50	1.1263	0.7001	1.0489	5.07	1	0.4468	4	0.6019	0.0008	13.08	5	1.0487	0.0008
52	1.2102	0.7976	1.1259	5.50	2	0.7855	3	0.3401	0.0008	13.11	5	1.1256	0.0008
54	1.2970	0.8953	1.2053	5.89	2	0.8438	3	0.3612	0.0009	13.13	5	1.2050	0.0009

Jack Pine Sawlog and Pulp Volume Estimates

15 metre

Total Height - 16 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0928	0.0521	0.0867	5.86	2	0.0482	2	0.0322	0.0088	12.55	4	0.0804	0.0088
14	0.1238	0.0945	0.1168	8.49	3	0.0898	2	0.0269	0.0022	13.04	5	0.1167	0.0022
16	0.1587	0.1330	0.1504	9.77	3	0.1157	2	0.0338	0.0027	13.39	5	0.1495	0.0027
18	0.1974	0.1729	0.1874	10.59	4	0.1719	1	0.0140	0.0032	13.65	5	0.1858	0.0032
20	0.2397	0.2152	0.2278	11.17	4	0.2089	1	0.0166	0.0038	13.86	5	0.2255	0.0038
22	0.2855	0.2603	0.2715	11.62	4	0.2492	1	0.0193	0.0044	14.02	5	0.2685	0.0044
24	0.3348	0.3082	0.3184	11.98	4	0.2924	1	0.0222	0.0051	14.16	5	0.3146	0.0051
26	0.3875	0.3591	0.3685	12.27	4	0.3387	1	0.0252	0.0057	14.28	5	0.3639	0.0057
28	0.4436	0.4129	0.4216	12.51	4	0.3879	1	0.0283	0.0064	14.38	5	0.4162	0.0064
30	0.5029	0.4695	0.4776	12.72	4	0.4400	1	0.0315	0.0071	14.47	5	0.4716	0.0071
32	0.5654	0.5291	0.5367	12.90	4	0.4949	1	0.0349	0.0079	14.54	5	0.5298	0.0079
34	0.6311	0.5914	0.5986	13.06	5	0.5910	0	0.0000	0.0086	14.61	5	0.5910	0.0086
36	0.7000	0.6566	0.6634	13.20	5	0.6549	0	0.0000	0.0094	14.67	5	0.6549	0.0094
38	0.7720	0.7246	0.7311	13.32	5	0.7218	0	0.0000	0.0102	14.72	5	0.7218	0.0102
40	0.8470	0.7953	0.8015	13.43	5	0.7913	0	0.0000	0.0110	14.77	5	0.7913	0.0110
42	0.9251	0.8687	0.8747	13.53	5	0.8637	0	0.0000	0.0118	14.82	5	0.8637	0.0118
44	1.0062	0.9449	0.9506	13.62	5	0.9387	0	0.0000	0.0126	14.86	5	0.9387	0.0126
46	1.0904	1.0237	1.0292	13.71	5	1.0165	0	0.0000	0.0135	14.90	5	1.0165	0.0135
48	1.1775	1.1052	1.1105	13.78	5	1.0969	0	0.0000	0.0144	14.93	5	1.0969	0.0144
50	1.2676	1.1894	1.1945	13.85	5	1.1800	0	0.0000	0.0153	14.97	5	1.1800	0.0153
52	1.3607	1.2762	1.2812	13.92	5	1.2657	0	0.0000	0.0162	15.00	5	1.2657	0.0162
54	1.4567	1.3656	1.3704	13.98	5	1.3540	0	0.0000	0.0171	15.02	5	1.3540	0.0171
56	1.5557	1.4577	1.4623	14.04	5	1.4449	0	0.0000	0.0180	15.05	5	1.4449	0.0180
58	1.6576	1.5523	1.5568	14.09	5	1.5385	0	0.0000	0.0190	15.07	5	1.5385	0.0190
60	1.7624	1.6495	1.6539	14.14	5	1.6346	0	0.0000	0.0199	15.10	5	1.6346	0.0199

Total Height - 16 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0928	0.0000	0.0867		0	0.0000	4	0.0804	0.0088	12.55	4	0.0804	0.0088
14	0.1238	0.0000	0.1168		0	0.0000	5	0.1167	0.0022	13.04	5	0.1167	0.0022
16	0.1587	0.0284	0.1504	1.78	0	0.0000	5	0.1495	0.0027	13.39	5	0.1495	0.0027
18	0.1974	0.0972	0.1874	4.88	1	0.0586	4	0.1272	0.0032	13.65	5	0.1858	0.0032
20	0.2397	0.1613	0.2278	7.02	2	0.1299	3	0.0957	0.0038	13.86	5	0.2255	0.0038
22	0.2855	0.2172	0.2715	8.26	3	0.2110	2	0.0575	0.0044	14.02	5	0.2685	0.0044
24	0.3348	0.2717	0.3184	9.11	3	0.2484	2	0.0663	0.0051	14.16	5	0.3146	0.0051
26	0.3875	0.3270	0.3685	9.74	3	0.2884	2	0.0755	0.0057	14.28	5	0.3639	0.0057
28	0.4436	0.3840	0.4216	10.23	3	0.3312	2	0.0850	0.0064	14.38	5	0.4162	0.0064
30	0.5029	0.4432	0.4776	10.64	4	0.4400	1	0.0315	0.0071	14.47	5	0.4716	0.0071
32	0.5654	0.5048	0.5367	10.98	4	0.4949	1	0.0349	0.0079	14.54	5	0.5298	0.0079
34	0.6311	0.5689	0.5986	11.27	4	0.5527	1	0.0383	0.0086	14.61	5	0.5910	0.0086
36	0.7000	0.6355	0.6634	11.51	4	0.6131	1	0.0418	0.0094	14.67	5	0.6549	0.0094
38	0.7720	0.7046	0.7311	11.73	4	0.6763	1	0.0454	0.0102	14.72	5	0.7218	0.0102
40	0.8470	0.7764	0.8015	11.93	4	0.7422	1	0.0491	0.0110	14.77	5	0.7913	0.0110
42	0.9251	0.8508	0.8747	12.10	4	0.8107	1	0.0529	0.0118	14.82	5	0.8637	0.0118
44	1.0062	0.9278	0.9506	12.26	4	0.8819	1	0.0568	0.0126	14.86	5	0.9387	0.0126
46	1.0904	1.0073	1.0292	12.40	4	0.9557	1	0.0608	0.0135	14.90	5	1.0165	0.0135
48	1.1775	1.0895	1.1105	12.53	4	1.0321	1	0.0648	0.0144	14.93	5	1.0969	0.0144
50	1.2676	1.1743	1.1945	12.65	4	1.1110	1	0.0689	0.0153	14.97	5	1.1800	0.0153
52	1.3607	1.2616	1.2812	12.75	4	1.1925	1	0.0731	0.0162	15.00	5	1.2657	0.0162
54	1.4567	1.3516	1.3704	12.86	4	1.2766	1	0.0774	0.0171	15.02	5	1.3540	0.0171
56	1.5557	1.4441	1.4623	12.95	4	1.3632	1	0.0818	0.0180	15.05	5	1.4449	0.0180
58	1.6576	1.5391	1.5568	13.04	5	1.5385	0	0.0000	0.0190	15.07	5	1.5385	0.0190
60	1.7624	1.6367	1.6539	13.12	5	1.6346	0	0.0000	0.0199	15.10	5	1.6346	0.0199

Jack Pine Sawlog and Pulp Volume Estimates

16 metre

Total Height - 16 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0928	0.0000	0.0867		0	0.0000	4	0.0804	0.0088	12.55	4	0.0804	0.0088
14	0.1238	0.0000	0.1168		0	0.0000	5	0.1167	0.0022	13.04	5	0.1167	0.0022
16	0.1587	0.0000	0.1504		0	0.0000	5	0.1495	0.0027	13.39	5	0.1495	0.0027
18	0.1974	0.0000	0.1874		0	0.0000	5	0.1858	0.0032	13.65	5	0.1858	0.0032
20	0.2397	0.0136	0.2278	0.72	0	0.0000	5	0.2255	0.0038	13.86	5	0.2255	0.0038
22	0.2855	0.0701	0.2715	2.27	0	0.0000	5	0.2685	0.0044	14.02	5	0.2685	0.0044
24	0.3348	0.1491	0.3184	4.20	1	0.1039	4	0.2107	0.0051	14.16	5	0.3146	0.0051
26	0.3875	0.2307	0.3685	5.87	2	0.2151	3	0.1488	0.0057	14.28	5	0.3639	0.0057
28	0.4436	0.3049	0.4216	7.03	2	0.2479	3	0.1683	0.0064	14.38	5	0.4162	0.0064
30	0.5029	0.3753	0.4776	7.88	2	0.2829	3	0.1887	0.0071	14.47	5	0.4716	0.0071
32	0.5654	0.4448	0.5367	8.53	3	0.4245	2	0.1053	0.0079	14.54	5	0.5298	0.0079
34	0.6311	0.5147	0.5986	9.06	3	0.4751	2	0.1159	0.0086	14.61	5	0.5910	0.0086
36	0.7000	0.5860	0.6634	9.49	3	0.5281	2	0.1268	0.0094	14.67	5	0.6549	0.0094
38	0.7720	0.6589	0.7311	9.86	3	0.5837	2	0.1381	0.0102	14.72	5	0.7218	0.0102
40	0.8470	0.7337	0.8015	10.18	3	0.6417	2	0.1496	0.0110	14.77	5	0.7913	0.0110
42	0.9251	0.8107	0.8747	10.46	3	0.7022	2	0.1615	0.0118	14.82	5	0.8637	0.0118
44	1.0062	0.8899	0.9506	10.71	4	0.8819	1	0.0568	0.0126	14.86	5	0.9387	0.0126
46	1.0904	0.9715	1.0292	10.93	4	0.9557	1	0.0608	0.0135	14.90	5	1.0165	0.0135
48	1.1775	1.0554	1.1105	11.13	4	1.0321	1	0.0648	0.0144	14.93	5	1.0969	0.0144
50	1.2676	1.1417	1.1945	11.31	4	1.1110	1	0.0689	0.0153	14.97	5	1.1800	0.0153
52	1.3607	1.2304	1.2812	11.47	4	1.1925	1	0.0731	0.0162	15.00	5	1.2657	0.0162
54	1.4567	1.3216	1.3704	11.62	4	1.2766	1	0.0774	0.0171	15.02	5	1.3540	0.0171
56	1.5557	1.4152	1.4623	11.76	4	1.3632	1	0.0818	0.0180	15.05	5	1.4449	0.0180
58	1.6576	1.5112	1.5568	11.89	4	1.4522	1	0.0862	0.0190	15.07	5	1.5385	0.0190
60	1.7624	1.6098	1.6539	12.01	4	1.5438	1	0.0907	0.0199	15.10	5	1.6346	0.0199

Total Height - 16 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0928	0.0000	0.0867		0	0.0000	4	0.0804	0.0088	12.55	4	0.0804	0.0088
14	0.1238	0.0000	0.1168		0	0.0000	5	0.1167	0.0022	13.04	5	0.1167	0.0022
16	0.1587	0.0000	0.1504		0	0.0000	5	0.1495	0.0027	13.39	5	0.1495	0.0027
18	0.1974	0.0000	0.1874		0	0.0000	5	0.1858	0.0032	13.65	5	0.1858	0.0032
20	0.2397	0.0000	0.2278		0	0.0000	5	0.2255	0.0038	13.86	5	0.2255	0.0038
22	0.2855	0.0000	0.2715		0	0.0000	5	0.2685	0.0044	14.02	5	0.2685	0.0044
24	0.3348	0.0000	0.3184		0	0.0000	5	0.3146	0.0051	14.16	5	0.3146	0.0051
26	0.3875	0.0527	0.3685	1.29	0	0.0000	5	0.3639	0.0057	14.28	5	0.3639	0.0057
28	0.4436	0.1223	0.4216	2.45	0	0.0000	5	0.4162	0.0064	14.38	5	0.4162	0.0064
30	0.5029	0.2084	0.4776	3.75	1	0.1619	4	0.3096	0.0071	14.47	5	0.4716	0.0071
32	0.5654	0.3014	0.5367	4.99	1	0.1841	4	0.3457	0.0079	14.54	5	0.5298	0.0079
34	0.6311	0.3918	0.5986	6.02	2	0.3593	3	0.2316	0.0086	14.61	5	0.5910	0.0086
36	0.7000	0.4785	0.6634	6.83	2	0.4007	3	0.2542	0.0094	14.67	5	0.6549	0.0094
38	0.7720	0.5631	0.7311	7.49	2	0.4442	3	0.2776	0.0102	14.72	5	0.7218	0.0102
40	0.8470	0.6470	0.8015	8.03	3	0.6417	2	0.1496	0.0110	14.77	5	0.7913	0.0110
42	0.9251	0.7311	0.8747	8.48	3	0.7022	2	0.1615	0.0118	14.82	5	0.8637	0.0118
44	1.0062	0.8162	0.9506	8.87	3	0.7651	2	0.1736	0.0126	14.86	5	0.9387	0.0126
46	1.0904	0.9026	1.0292	9.21	3	0.8304	2	0.1861	0.0135	14.90	5	1.0165	0.0135
48	1.1775	0.9906	1.1105	9.51	3	0.8982	2	0.1988	0.0144	14.93	5	1.0969	0.0144
50	1.2676	1.0605	1.1945	9.78	3	0.9683	2	0.2117	0.0153	14.97	5	1.1800	0.0153
52	1.3607	1.1723	1.2812	10.02	3	1.0407	2	0.2249	0.0162	15.00	5	1.2657	0.0162
54	1.4567	1.2662	1.3704	10.24	3	1.1156	2	0.2384	0.0171	15.02	5	1.3540	0.0171
56	1.5557	1.3622	1.4623	10.44	3	1.1928	2	0.2522	0.0180	15.05	5	1.4449	0.0180
58	1.6576	1.4605	1.5568	10.62	4	1.4522	1	0.0862	0.0190	15.07	5	1.5385	0.0190
60	1.7624	1.5610	1.6539	10.79	4	1.5438	1	0.0907	0.0199	15.10	5	1.6346	0.0199

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0928	0.0521	0.0667	5.86	2	0.0482	2	0.0322	0.0088	12.55	4	0.0804	0.0088
0.1238	0.0945	0.1168	8.49	3	0.0898	2	0.0269	0.0022	13.04	5	0.1167	0.0022
0.1587	0.1330	0.1504	9.77	3	0.1157	2	0.0338	0.0027	13.39	5	0.1495	0.0027
0.1974	0.1729	0.1874	10.59	4	0.1719	1	0.0140	0.0032	13.65	5	0.1858	0.0032
0.2397	0.2152	0.2278	11.17	4	0.2089	1	0.0166	0.0038	13.86	5	0.2255	0.0038
0.2855	0.2603	0.2715	11.62	4	0.2492	1	0.0193	0.0044	14.02	5	0.2685	0.0044
0.3348	0.3082	0.3184	11.98	4	0.2924	1	0.0222	0.0051	14.16	5	0.3146	0.0051
0.3875	0.3591	0.3685	12.27	4	0.3387	1	0.0252	0.0057	14.28	5	0.3639	0.0057
0.4436	0.4129	0.4216	12.51	4	0.3879	1	0.0283	0.0064	14.38	5	0.4162	0.0064
0.5029	0.4695	0.4776	12.72	4	0.4400	1	0.0315	0.0071	14.47	5	0.4716	0.0071
0.5654	0.5291	0.5367	12.90	4	0.4949	1	0.0349	0.0079	14.54	5	0.5298	0.0079
0.6311	0.5914	0.5986	13.06	5	0.5910	0	0.0000	0.0086	14.61	5	0.5910	0.0086
0.7000	0.6566	0.6634	13.20	5	0.6549	0	0.0000	0.0094	14.67	5	0.6549	0.0094
0.7720	0.7246	0.7311	13.32	5	0.7218	0	0.0000	0.0102	14.72	5	0.7218	0.0102
0.8470	0.7953	0.8015	13.43	5	0.7913	0	0.0000	0.0110	14.77	5	0.7913	0.0110
0.9251	0.8687	0.8747	13.53	5	0.8637	0	0.0000	0.0118	14.82	5	0.8637	0.0118
1.0062	0.9449	0.9506	13.62	5	0.9387	0	0.0000	0.0126	14.86	5	0.9387	0.0126
1.0904	1.0237	1.0292	13.71	5	1.0165	0	0.0000	0.0135	14.90	5	1.0165	0.0135
1.1775	1.1052	1.1105	13.78	5	1.0969	0	0.0000	0.0144	14.93	5	1.0969	0.0144
1.2676	1.1894	1.1945	13.85	5	1.1800	0	0.0000	0.0153	14.97	5	1.1800	0.0153
1.3607	1.2762	1.2812	13.92	5	1.2657	0	0.0000	0.0162	15.00	5	1.2657	0.0162
1.4567	1.3656	1.3704	13.98	5	1.3540	0	0.0000	0.0171	15.02	5	1.3540	0.0171
1.5557	1.4577	1.4623	14.04	5	1.4449	0	0.0000	0.0180	15.05	5	1.4449	0.0180
1.6576	1.5523	1.5568	14.09	5	1.5385	0	0.0000	0.0190	15.07	5	1.5385	0.0190
1.7624	1.6495	1.6539	14.14	5	1.6346	0	0.0000	0.0199	15.10	5	1.6346	0.0199

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0928	0.0000	0.0667		0	0.0000	4	0.0804	0.0088	12.55	4	0.0804	0.0088
0.1238	0.0000	0.1168		0	0.0000	5	0.1167	0.0022	13.04	5	0.1167	0.0022
0.1587	0.0284	0.1504	1.78	0	0.0000	5	0.1495	0.0027	13.39	5	0.1495	0.0027
0.1974	0.0972	0.1874	4.88	1	0.0586	4	0.1272	0.0032	13.65	5	0.1858	0.0032
0.2397	0.1613	0.2278	7.02	2	0.1299	3	0.0957	0.0038	13.86	5	0.2255	0.0038
0.2855	0.2172	0.2715	8.26	3	0.2110	2	0.0575	0.0044	14.02	5	0.2685	0.0044
0.3348	0.2717	0.3184	9.11	3	0.2484	2	0.0663	0.0051	14.16	5	0.3146	0.0051
0.3875	0.3270	0.3685	9.74	3	0.2884	2	0.0755	0.0057	14.28	5	0.3639	0.0057
0.4436	0.3840	0.4216	10.23	3	0.3312	2	0.0850	0.0064	14.38	5	0.4162	0.0064
0.5029	0.4432	0.4776	10.64	4	0.4400	1	0.0315	0.0071	14.47	5	0.4716	0.0071
0.5654	0.5048	0.5367	10.98	4	0.4949	1	0.0349	0.0079	14.54	5	0.5298	0.0079
0.6311	0.5689	0.5986	11.27	4	0.5527	1	0.0383	0.0086	14.61	5	0.5910	0.0086
0.7000	0.6355	0.6634	11.51	4	0.6131	1	0.0418	0.0094	14.67	5	0.6549	0.0094
0.7720	0.7046	0.7311	11.73	4	0.6763	1	0.0454	0.0102	14.72	5	0.7218	0.0102
0.8470	0.7764	0.8015	11.93	4	0.7422	1	0.0491	0.0110	14.77	5	0.7913	0.0110
0.9251	0.8509	0.8747	12.10	4	0.8107	1	0.0529	0.0118	14.82	5	0.8637	0.0118
1.0062	0.9278	0.9506	12.26	4	0.8819	1	0.0568	0.0126	14.86	5	0.9387	0.0126
1.0904	1.0073	1.0292	12.40	4	0.9557	1	0.0608	0.0135	14.90	5	1.0165	0.0135
1.1775	1.0895	1.1105	12.53	4	1.0321	1	0.0648	0.0144	14.93	5	1.0969	0.0144
1.2676	1.1743	1.1945	12.65	4	1.1110	1	0.0689	0.0153	14.97	5	1.1800	0.0153
1.3607	1.2618	1.2812	12.75	4	1.1925	1	0.0731	0.0162	15.00	5	1.2657	0.0162
1.4567	1.3518	1.3704	12.86	4	1.2766	1	0.0774	0.0171	15.02	5	1.3540	0.0171
1.5557	1.4441	1.4623	12.95	4	1.3632	1	0.0818	0.0180	15.05	5	1.4449	0.0180
1.6576	1.5391	1.5568	13.04	5	1.5385	0	0.0000	0.0190	15.07	5	1.5385	0.0190
1.7624	1.6367	1.6539	13.12	5	1.6346	0	0.0000	0.0199	15.10	5	1.6346	0.0199

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
0.0928	0.0000	0.0867		0	0.0000	4	0.0804	0.0088	12.55	4	0.0804	0.0088
0.1238	0.0000	0.1168		0	0.0000	5	0.1167	0.0022	13.04	5	0.1167	0.0022
0.1587	0.0000	0.1504		0	0.0000	5	0.1495	0.0027	13.39	5	0.1495	0.0027
0.1974	0.0000	0.1874		0	0.0000	5	0.1858	0.0032	13.65	5	0.1858	0.0032
0.2397	0.0136	0.2278	0.72	0	0.0000	5	0.2255	0.0038	13.86	5	0.2255	0.0038
0.2855	0.0701	0.2715	2.27	0	0.0000	5	0.2685	0.0044	14.02	5	0.2685	0.0044
0.3348	0.1491	0.3184	4.20	1	0.1039	4	0.2107	0.0051	14.16	5	0.3146	0.0051
0.3875	0.2307	0.3685	5.87	2	0.2151	3	0.1498	0.0057	14.28	5	0.3639	0.0057
0.4436	0.3049	0.4216	7.03	2	0.2479	3	0.1683	0.0064	14.36	5	0.4162	0.0064
0.5029	0.3753	0.4776	7.88	2	0.2829	3	0.1887	0.0071	14.47	5	0.4716	0.0071
0.5654	0.4448	0.5367	8.53	3	0.4245	2	0.1053	0.0079	14.54	5	0.5298	0.0079
0.6311	0.5147	0.5986	9.06	3	0.4751	2	0.1159	0.0086	14.61	5	0.5910	0.0086
0.7000	0.5880	0.6634	9.49	3	0.5281	2	0.1268	0.0094	14.67	5	0.6549	0.0094
0.7720	0.6589	0.7311	9.86	3	0.5837	2	0.1381	0.0102	14.72	5	0.7218	0.0102
0.8470	0.7337	0.8015	10.18	3	0.6417	2	0.1496	0.0110	14.77	5	0.7913	0.0110
0.9251	0.8107	0.8747	10.46	3	0.7022	2	0.1615	0.0118	14.82	5	0.8637	0.0118
1.0062	0.8899	0.9506	10.71	4	0.8619	1	0.0568	0.0126	14.86	5	0.9387	0.0126
1.0904	0.9715	1.0292	10.93	4	0.9557	1	0.0606	0.0135	14.90	5	1.0165	0.0135
1.1775	1.0554	1.1105	11.13	4	1.0321	1	0.0648	0.0144	14.93	5	1.0969	0.0144
1.2676	1.1417	1.1945	11.31	4	1.1110	1	0.0689	0.0153	14.97	5	1.1800	0.0153
1.3607	1.2304	1.2812	11.47	4	1.1925	1	0.0731	0.0162	15.00	5	1.2657	0.0162
1.4567	1.3216	1.3704	11.62	4	1.2766	1	0.0774	0.0171	15.02	5	1.3540	0.0171
1.5557	1.4152	1.4623	11.76	4	1.3632	1	0.0818	0.0180	15.05	5	1.4449	0.0180
1.6578	1.5112	1.5568	11.89	4	1.4522	1	0.0862	0.0190	15.07	5	1.5385	0.0190
1.7624	1.6098	1.6539	12.01	4	1.5436	1	0.0907	0.0199	15.10	5	1.6346	0.0199

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
0.0928	0.0000	0.0867		0	0.0000	4	0.0804	0.0088	12.55	4	0.0804	0.0088
0.1238	0.0000	0.1168		0	0.0000	5	0.1167	0.0022	13.04	5	0.1167	0.0022
0.1587	0.0000	0.1504		0	0.0000	5	0.1495	0.0027	13.39	5	0.1495	0.0027
0.1974	0.0000	0.1874		0	0.0000	5	0.1858	0.0032	13.65	5	0.1858	0.0032
0.2397	0.0000	0.2278		0	0.0000	5	0.2255	0.0038	13.86	5	0.2255	0.0038
0.2855	0.0000	0.2715		0	0.0000	5	0.2685	0.0044	14.02	5	0.2685	0.0044
0.3348	0.0000	0.3184		0	0.0000	5	0.3146	0.0051	14.16	5	0.3146	0.0051
0.3875	0.0527	0.3685	1.29	0	0.0000	5	0.3639	0.0057	14.28	5	0.3639	0.0057
0.4436	0.1223	0.4216	2.45	0	0.0000	5	0.4162	0.0064	14.36	5	0.4162	0.0064
0.5029	0.2084	0.4776	3.75	1	0.1619	4	0.3096	0.0071	14.47	5	0.4716	0.0071
0.5654	0.3014	0.5367	4.99	1	0.1841	4	0.3457	0.0079	14.54	5	0.5298	0.0079
0.6311	0.3918	0.5986	6.02	2	0.3593	3	0.2318	0.0086	14.61	5	0.5910	0.0086
0.7000	0.4786	0.6634	6.83	2	0.4007	3	0.2542	0.0094	14.67	5	0.6549	0.0094
0.7720	0.5631	0.7311	7.49	2	0.4442	3	0.2776	0.0102	14.72	5	0.7218	0.0102
0.8470	0.6470	0.8015	8.03	3	0.6417	2	0.1496	0.0110	14.77	5	0.7913	0.0110
0.9251	0.7311	0.8747	8.48	3	0.7022	2	0.1615	0.0118	14.82	5	0.8637	0.0118
1.0062	0.8162	0.9506	8.87	3	0.7651	2	0.1736	0.0126	14.86	5	0.9387	0.0126
1.0904	0.9026	1.0292	9.21	3	0.8304	2	0.1861	0.0135	14.90	5	1.0165	0.0135
1.1775	0.9908	1.1105	9.51	3	0.8982	2	0.1988	0.0144	14.93	5	1.0969	0.0144
1.2676	1.0805	1.1945	9.78	3	0.9683	2	0.2117	0.0153	14.97	5	1.1800	0.0153
1.3607	1.1723	1.2812	10.02	3	1.0407	2	0.2249	0.0162	15.00	5	1.2657	0.0162
1.4567	1.2662	1.3704	10.24	3	1.1156	2	0.2384	0.0171	15.02	5	1.3540	0.0171
1.5557	1.3622	1.4623	10.44	3	1.1929	2	0.2522	0.0180	15.05	5	1.4449	0.0180
1.6578	1.4605	1.5568	10.62	4	1.4522	1	0.0862	0.0190	15.07	5	1.5385	0.0190
1.7624	1.5610	1.6539	10.79	4	1.5436	1	0.0907	0.0199	15.10	5	1.6346	0.0199

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0928	0.0000	0.0867		0	0.0000	4	0.0804	0.0088	12.55	4	0.0804	0.0088
0.1238	0.0000	0.1168		0	0.0000	5	0.1167	0.0022	13.04	5	0.1167	0.0022
0.1587	0.0000	0.1504		0	0.0000	5	0.1495	0.0027	13.39	5	0.1495	0.0027
0.1974	0.0000	0.1874		0	0.0000	5	0.1858	0.0032	13.66	5	0.1858	0.0032
0.2397	0.0000	0.2278		0	0.0000	5	0.2255	0.0038	13.86	5	0.2255	0.0038
0.2855	0.0000	0.2715		0	0.0000	5	0.2685	0.0044	14.02	5	0.2685	0.0044
0.3348	0.0000	0.3184		0	0.0000	5	0.3146	0.0051	14.16	5	0.3146	0.0051
0.3875	0.0000	0.3685		0	0.0000	5	0.3639	0.0057	14.28	5	0.3639	0.0057
0.4436	0.0000	0.4216		0	0.0000	5	0.4162	0.0064	14.38	5	0.4162	0.0064
0.5029	0.0398	0.4776	0.82	0	0.0000	5	0.4716	0.0071	14.47	5	0.4716	0.0071
0.5654	0.1044	0.5367	1.62	0	0.0000	5	0.5298	0.0079	14.54	5	0.5298	0.0079
0.6311	0.1837	0.5986	2.49	0	0.0000	5	0.5910	0.0086	14.61	5	0.5910	0.0086
0.7000	0.2758	0.6634	3.43	1	0.2326	4	0.4223	0.0094	14.67	5	0.6549	0.0094
0.7720	0.3761	0.7311	4.37	1	0.2590	4	0.4627	0.0102	14.72	5	0.7218	0.0102
0.8470	0.4785	0.8015	5.22	1	0.2869	4	0.5045	0.0110	14.77	5	0.7913	0.0110
0.9251	0.5797	0.8747	5.96	2	0.5375	3	0.3262	0.0118	14.82	5	0.8637	0.0118
1.0062	0.6790	0.9506	6.58	2	0.5672	3	0.3516	0.0126	14.86	5	0.9387	0.0126
1.0904	0.7771	1.0292	7.12	2	0.6390	3	0.3775	0.0136	14.90	5	1.0165	0.0136
1.1775	0.8748	1.1105	7.58	2	0.6926	3	0.4041	0.0144	14.93	5	1.0969	0.0144
1.2676	0.9726	1.1945	7.98	3	0.9663	2	0.2117	0.0153	14.97	5	1.1800	0.0153
1.3607	1.0715	1.2812	8.34	3	1.0407	2	0.2249	0.0162	15.00	5	1.2657	0.0162
1.4567	1.1712	1.3704	8.66	3	1.1156	2	0.2384	0.0171	15.02	5	1.3540	0.0171
1.5557	1.2724	1.4623	8.94	3	1.1928	2	0.2522	0.0180	15.05	5	1.4449	0.0180
1.6576	1.3751	1.5568	9.20	3	1.2723	2	0.2662	0.0190	15.07	5	1.5386	0.0190
1.7624	1.4796	1.6539	9.43	3	1.3541	2	0.2804	0.0199	15.10	5	1.6346	0.0199

Tree height – 18 m

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0928	0.0000	0.0867		0	0.0000	4	0.0804	0.0088	12.55	4	0.0804	0.0088
0.1238	0.0000	0.1168		0	0.0000	5	0.1167	0.0022	13.04	5	0.1167	0.0022
0.1587	0.0000	0.1504		0	0.0000	5	0.1495	0.0027	13.39	5	0.1495	0.0027
0.1974	0.0000	0.1874		0	0.0000	5	0.1858	0.0032	13.66	5	0.1858	0.0032
0.2397	0.0000	0.2278		0	0.0000	5	0.2255	0.0038	13.86	5	0.2255	0.0038
0.2855	0.0000	0.2715		0	0.0000	5	0.2685	0.0044	14.02	5	0.2685	0.0044
0.3348	0.0000	0.3184		0	0.0000	5	0.3146	0.0051	14.16	5	0.3146	0.0051
0.3875	0.0000	0.3685		0	0.0000	5	0.3639	0.0057	14.28	5	0.3639	0.0057
0.4436	0.0000	0.4216		0	0.0000	5	0.4162	0.0064	14.38	5	0.4162	0.0064
0.5029	0.0000	0.4776		0	0.0000	5	0.4716	0.0071	14.47	5	0.4716	0.0071
0.5654	0.0000	0.5367		0	0.0000	5	0.5298	0.0079	14.54	5	0.5298	0.0079
0.6311	0.0258	0.5986	0.58	0	0.0000	5	0.5910	0.0086	14.61	5	0.5910	0.0086
0.7000	0.0910	0.6634	1.17	0	0.0000	5	0.6549	0.0094	14.67	5	0.6549	0.0094
0.7720	0.1668	0.7311	1.81	0	0.0000	5	0.7218	0.0102	14.72	5	0.7218	0.0102
0.8470	0.2539	0.8015	2.49	0	0.0000	5	0.7913	0.0110	14.77	5	0.7913	0.0110
0.9251	0.3516	0.8747	3.20	1	0.3161	4	0.5476	0.0118	14.82	5	0.8637	0.0118
1.0062	0.4575	0.9506	3.92	1	0.3467	4	0.5920	0.0126	14.86	5	0.9387	0.0126
1.0904	0.5681	1.0292	4.61	1	0.3796	4	0.6377	0.0136	14.90	5	1.0165	0.0136
1.1775	0.6803	1.1105	5.25	1	0.4122	4	0.6847	0.0144	14.93	5	1.0969	0.0144
1.2676	0.7925	1.1945	5.82	2	0.7498	3	0.4313	0.0153	14.97	5	1.1800	0.0153
1.3607	0.9041	1.2812	6.33	2	0.8066	3	0.4592	0.0162	15.00	5	1.2657	0.0162
1.4567	1.0152	1.3704	6.79	2	0.8664	3	0.4879	0.0171	15.02	5	1.3540	0.0171
1.5557	1.1263	1.4623	7.19	2	0.9283	3	0.5166	0.0180	15.05	5	1.4449	0.0180
1.6576	1.2377	1.5568	7.56	2	0.9923	3	0.5462	0.0190	15.07	5	1.5386	0.0190
1.7624	1.3497	1.6539	7.87	2	1.0582	3	0.5764	0.0199	15.10	5	1.6346	0.0199

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.1394	0.1074	0.1322	9.66	3	0.0922	2	0.0350	0.0073	14.72	5	0.1272	0.0073
0.1787	0.1510	0.1703	11.09	4	0.1458	1	0.0174	0.0091	15.10	5	0.1632	0.0091
0.2222	0.1962	0.2123	12.00	4	0.1818	1	0.0213	0.0111	15.40	5	0.2031	0.0111
0.2699	0.2441	0.2582	12.66	4	0.2213	2	0.0366	0.0018	15.63	6	0.2580	0.0018
0.3215	0.2952	0.3077	13.16	5	0.2039	1	0.0132	0.0021	15.81	6	0.3071	0.0021
0.3769	0.3496	0.3608	13.56	5	0.3447	1	0.0151	0.0024	15.97	6	0.3588	0.0024
0.4362	0.4071	0.4175	13.86	5	0.3989	1	0.0171	0.0027	16.10	6	0.4160	0.0027
0.4991	0.4679	0.4775	14.15	5	0.4585	1	0.0192	0.0030	16.21	6	0.4757	0.0030
0.5656	0.5320	0.5409	14.38	5	0.5173	1	0.0214	0.0034	16.31	6	0.5387	0.0034
0.6356	0.5992	0.6076	14.58	5	0.5814	1	0.0236	0.0037	16.39	6	0.6050	0.0037
0.7091	0.6696	0.6776	14.75	5	0.6486	1	0.0259	0.0041	16.47	6	0.6745	0.0041
0.7861	0.7431	0.7507	14.91	5	0.7189	1	0.0283	0.0044	16.53	6	0.7472	0.0044
0.8664	0.8197	0.8269	15.04	5	0.7923	1	0.0307	0.0048	16.59	6	0.8231	0.0048
0.9501	0.8993	0.9062	15.16	5	0.8688	1	0.0332	0.0052	16.65	6	0.9019	0.0052
1.0371	0.9819	0.9886	15.27	5	0.9481	1	0.0357	0.0056	16.70	6	0.9838	0.0056
1.1274	1.0675	1.0738	15.36	5	1.0305	1	0.0383	0.0059	16.74	6	1.0687	0.0059
1.2209	1.1560	1.1621	15.47	5	1.1157	1	0.0409	0.0063	16.78	6	1.1566	0.0063
1.3176	1.2475	1.2533	15.56	6	1.2474	0	0.0000	0.0067	16.82	6	1.2474	0.0067
1.4175	1.3418	1.3474	15.63	6	1.3410	0	0.0000	0.0072	16.86	6	1.3410	0.0072
1.5205	1.4389	1.4444	15.70	6	1.4376	0	0.0000	0.0076	16.89	6	1.4376	0.0076
1.6267	1.5389	1.5442	15.77	6	1.5370	0	0.0000	0.0080	16.92	6	1.5370	0.0080
1.7360	1.6417	1.6469	15.83	6	1.6392	0	0.0000	0.0084	16.95	6	1.6392	0.0084
1.8484	1.7473	1.7524	15.89	6	1.7442	0	0.0000	0.0089	16.98	6	1.7442	0.0089
1.9639	1.8557	1.8606	15.94	6	1.8520	0	0.0000	0.0093	17.00	6	1.8520	0.0093

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.1394	0.0000	0.1322		0	0.0000	5	0.1272	0.0073	14.72	5	0.1272	0.0073
0.1787	0.0294	0.1703	1.84	0	0.0000	5	0.1632	0.0091	15.10	5	0.1632	0.0091
0.2222	0.1101	0.2123	5.54	2	0.1074	3	0.0957	0.0111	15.40	5	0.2031	0.0111
0.2699	0.1840	0.2582	8.03	3	0.1821	3	0.0759	0.0018	15.63	6	0.2580	0.0018
0.3215	0.2473	0.3077	9.43	3	0.2181	3	0.0890	0.0021	15.81	6	0.3071	0.0021
0.3769	0.3099	0.3608	10.37	3	0.2570	3	0.1028	0.0024	15.97	6	0.3588	0.0024
0.4362	0.3715	0.4175	11.07	4	0.3600	2	0.0561	0.0027	16.10	6	0.4160	0.0027
0.4991	0.4360	0.4775	11.63	4	0.4126	2	0.0631	0.0030	16.21	6	0.4757	0.0030
0.5656	0.5029	0.5409	12.06	4	0.4684	2	0.0703	0.0034	16.31	6	0.5387	0.0034
0.6356	0.5724	0.6076	12.45	4	0.5272	2	0.0778	0.0037	16.39	6	0.6050	0.0037
0.7091	0.6447	0.6776	12.77	4	0.5890	2	0.0856	0.0041	16.47	6	0.6745	0.0041
0.7861	0.7198	0.7507	13.05	5	0.7189	1	0.0283	0.0044	16.53	6	0.7472	0.0044
0.8664	0.7977	0.8269	13.29	5	0.7923	1	0.0307	0.0048	16.59	6	0.8231	0.0048
0.9501	0.8785	0.9062	13.50	5	0.8688	1	0.0332	0.0052	16.65	6	0.9019	0.0052
1.0371	0.9621	0.9886	13.69	5	0.9481	1	0.0357	0.0056	16.70	6	0.9838	0.0056
1.1274	1.0486	1.0738	13.86	5	1.0305	1	0.0383	0.0059	16.74	6	1.0687	0.0059
1.2209	1.1379	1.1621	14.02	5	1.1157	1	0.0409	0.0063	16.78	6	1.1566	0.0063
1.3176	1.2301	1.2533	14.16	5	1.2039	1	0.0436	0.0067	16.82	6	1.2474	0.0067
1.4175	1.3250	1.3474	14.29	5	1.2947	1	0.0463	0.0072	16.86	6	1.3410	0.0072
1.5205	1.4228	1.4444	14.41	5	1.3880	1	0.0491	0.0076	16.89	6	1.4376	0.0076
1.6267	1.5234	1.5442	14.52	5	1.4851	1	0.0519	0.0080	16.92	6	1.5370	0.0080
1.7360	1.6267	1.6469	14.62	5	1.5844	1	0.0548	0.0084	16.95	6	1.6392	0.0084
1.8484	1.7327	1.7524	14.72	5	1.6865	1	0.0577	0.0089	16.98	6	1.7442	0.0089
1.9639	1.8416	1.8606	14.81	5	1.7914	1	0.0606	0.0093	17.00	6	1.8520	0.0093

Jack Pine Sawlog and Pulp Volume Estimates

16 metre

Total Height - 16 m				Sawlog Upper Diameter - 30 cm						Stump height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0928	0.0000	0.0867		0	0.0000	4	0.0804	0.0088	12.55	4	0.0804	0.0088
14	0.1238	0.0000	0.1168		0	0.0000	5	0.1167	0.0022	13.04	5	0.1167	0.0022
16	0.1587	0.0000	0.1504		0	0.0000	5	0.1495	0.0027	13.39	5	0.1495	0.0027
18	0.1974	0.0000	0.1874		0	0.0000	5	0.1858	0.0032	13.65	5	0.1858	0.0032
20	0.2397	0.0000	0.2278		0	0.0000	5	0.2255	0.0038	13.86	5	0.2255	0.0038
22	0.2855	0.0000	0.2715		0	0.0000	5	0.2685	0.0044	14.02	5	0.2685	0.0044
24	0.3348	0.0000	0.3184		0	0.0000	5	0.3146	0.0051	14.16	5	0.3146	0.0051
26	0.3875	0.0000	0.3685		0	0.0000	5	0.3639	0.0057	14.28	5	0.3639	0.0057
28	0.4436	0.0000	0.4216		0	0.0000	5	0.4162	0.0064	14.38	5	0.4162	0.0064
30	0.5029	0.0388	0.4776	0.82	0	0.0000	5	0.4716	0.0071	14.47	5	0.4716	0.0071
32	0.5654	0.1044	0.5367	1.62	0	0.0000	5	0.5298	0.0079	14.54	5	0.5298	0.0079
34	0.6311	0.1837	0.5986	2.49	0	0.0000	5	0.5910	0.0086	14.61	5	0.5910	0.0086
36	0.7000	0.2758	0.6634	3.43	1	0.2326	4	0.4223	0.0094	14.67	5	0.6549	0.0094
38	0.7720	0.3761	0.7311	4.37	1	0.2590	4	0.4627	0.0102	14.72	5	0.7218	0.0102
40	0.8470	0.4785	0.8015	5.22	1	0.2869	4	0.5045	0.0110	14.77	5	0.7913	0.0110
42	0.9251	0.5797	0.8747	5.96	2	0.5375	3	0.3262	0.0118	14.82	5	0.8637	0.0118
44	1.0062	0.6790	0.9506	6.58	2	0.5872	3	0.3516	0.0126	14.86	5	0.9387	0.0126
46	1.0904	0.7771	1.0292	7.12	2	0.6390	3	0.3775	0.0135	14.90	5	1.0165	0.0135
48	1.1775	0.8748	1.1105	7.58	2	0.6928	3	0.4041	0.0144	14.93	5	1.0969	0.0144
50	1.2676	0.9728	1.1945	7.98	3	0.9683	2	0.2117	0.0153	14.97	5	1.1800	0.0153
52	1.3607	1.0715	1.2812	8.34	3	1.0407	2	0.2249	0.0162	15.00	5	1.2657	0.0162
54	1.4567	1.1712	1.3704	8.66	3	1.1156	2	0.2384	0.0171	15.02	5	1.3540	0.0171
56	1.5557	1.2724	1.4623	8.94	3	1.1928	2	0.2522	0.0180	15.05	5	1.4449	0.0180
58	1.6576	1.3751	1.5568	9.20	3	1.2723	2	0.2662	0.0190	15.07	5	1.5385	0.0190
60	1.7624	1.4796	1.6539	9.43	3	1.3541	2	0.2804	0.0199	15.10	5	1.6346	0.0199

Total Height - 16 m				Sawlog Upper Diameter - 35 cm						Stump height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0928	0.0000	0.0867		0	0.0000	4	0.0804	0.0088	12.55	4	0.0804	0.0088
14	0.1238	0.0000	0.1168		0	0.0000	5	0.1167	0.0022	13.04	5	0.1167	0.0022
16	0.1587	0.0000	0.1504		0	0.0000	5	0.1495	0.0027	13.39	5	0.1495	0.0027
18	0.1974	0.0000	0.1874		0	0.0000	5	0.1858	0.0032	13.65	5	0.1858	0.0032
20	0.2397	0.0000	0.2278		0	0.0000	5	0.2255	0.0038	13.86	5	0.2255	0.0038
22	0.2855	0.0000	0.2715		0	0.0000	5	0.2685	0.0044	14.02	5	0.2685	0.0044
24	0.3348	0.0000	0.3184		0	0.0000	5	0.3146	0.0051	14.16	5	0.3146	0.0051
26	0.3875	0.0000	0.3685		0	0.0000	5	0.3639	0.0057	14.28	5	0.3639	0.0057
28	0.4436	0.0000	0.4216		0	0.0000	5	0.4162	0.0064	14.38	5	0.4162	0.0064
30	0.5029	0.0000	0.4776		0	0.0000	5	0.4716	0.0071	14.47	5	0.4716	0.0071
32	0.5654	0.0000	0.5367		0	0.0000	5	0.5298	0.0079	14.54	5	0.5298	0.0079
34	0.6311	0.0258	0.5986	0.56	0	0.0000	5	0.5910	0.0086	14.61	5	0.5910	0.0086
36	0.7000	0.0910	0.6634	1.17	0	0.0000	5	0.6549	0.0094	14.67	5	0.6549	0.0094
38	0.7720	0.1668	0.7311	1.81	0	0.0000	5	0.7218	0.0102	14.72	5	0.7218	0.0102
40	0.8470	0.2539	0.8015	2.49	0	0.0000	5	0.7913	0.0110	14.77	5	0.7913	0.0110
42	0.9251	0.3516	0.8747	3.20	1	0.3161	4	0.5476	0.0118	14.82	5	0.8637	0.0118
44	1.0062	0.4575	0.9506	3.92	1	0.3467	4	0.5920	0.0126	14.86	5	0.9387	0.0126
46	1.0904	0.5681	1.0292	4.61	1	0.3788	4	0.6377	0.0135	14.90	5	1.0165	0.0135
48	1.1775	0.6803	1.1105	5.25	1	0.4122	4	0.6847	0.0144	14.93	5	1.0969	0.0144
50	1.2676	0.7925	1.1945	5.82	2	0.7486	3	0.4313	0.0153	14.97	5	1.1800	0.0153
52	1.3607	0.9041	1.2812	6.33	2	0.8065	3	0.4592	0.0162	15.00	5	1.2657	0.0162
54	1.4567	1.0152	1.3704	6.79	2	0.8664	3	0.4876	0.0171	15.02	5	1.3540	0.0171
56	1.5557	1.1263	1.4623	7.19	2	0.9283	3	0.5166	0.0180	15.05	5	1.4449	0.0180
58	1.6576	1.2377	1.5568	7.55	2	0.9923	3	0.5462	0.0190	15.07	5	1.5385	0.0190
60	1.7624	1.3497	1.6539	7.87	2	1.0582	3	0.5764	0.0199	15.10	5	1.6346	0.0199

Jack Pine Sawlog and Pulp Volume Estimates

18 metre

Total Height - 18 m				Sawlog Upper Diameter - 10 cm						Stump height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1394	0.1074	0.1322	9.66	3	0.0922	2	0.0350	0.0073	14.72	5	0.1272	0.0073
16	0.1787	0.1510	0.1703	11.09	4	0.1458	1	0.0174	0.0091	15.10	5	0.1632	0.0091
18	0.2222	0.1962	0.2123	12.00	4	0.1818	1	0.0213	0.0111	15.40	5	0.2031	0.0111
20	0.2699	0.2441	0.2582	12.66	4	0.2213	2	0.0366	0.0018	15.63	6	0.2580	0.0018
22	0.3215	0.2952	0.3077	13.16	5	0.2939	1	0.0132	0.0021	15.81	6	0.3071	0.0021
24	0.3769	0.3495	0.3608	13.56	5	0.3447	1	0.0151	0.0024	15.97	6	0.3598	0.0024
26	0.4362	0.4071	0.4175	13.88	5	0.3989	1	0.0171	0.0027	16.10	6	0.4160	0.0027
28	0.4991	0.4679	0.4775	14.15	5	0.4565	1	0.0192	0.0030	16.21	6	0.4757	0.0030
30	0.5656	0.5320	0.5409	14.38	5	0.5173	1	0.0214	0.0034	16.31	6	0.5387	0.0034
32	0.6356	0.5992	0.6076	14.58	5	0.5814	1	0.0236	0.0037	16.39	6	0.6050	0.0037
34	0.7091	0.6696	0.6776	14.75	5	0.6486	1	0.0259	0.0041	16.47	6	0.6745	0.0041
36	0.7861	0.7431	0.7507	14.91	5	0.7189	1	0.0283	0.0044	16.53	6	0.7472	0.0044
38	0.8664	0.8197	0.8269	15.04	5	0.7923	1	0.0307	0.0048	16.59	6	0.8231	0.0048
40	0.9501	0.8993	0.9062	15.16	5	0.8688	1	0.0332	0.0052	16.65	6	0.9019	0.0052
42	1.0371	0.9819	0.9885	15.27	5	0.9481	1	0.0357	0.0056	16.70	6	0.9838	0.0056
44	1.1274	1.0675	1.0738	15.38	5	1.0305	1	0.0383	0.0059	16.74	6	1.0687	0.0059
46	1.2209	1.1560	1.1621	15.47	5	1.1157	1	0.0409	0.0063	16.78	6	1.1566	0.0063
48	1.3176	1.2475	1.2533	15.55	6	1.2474	0	0.0000	0.0067	16.82	6	1.2474	0.0067
50	1.4175	1.3418	1.3474	15.63	6	1.3410	0	0.0000	0.0072	16.86	6	1.3410	0.0072
52	1.5205	1.4389	1.4444	15.70	6	1.4376	0	0.0000	0.0076	16.89	6	1.4376	0.0076
54	1.6267	1.5389	1.5442	15.77	6	1.5370	0	0.0000	0.0080	16.92	6	1.5370	0.0080
56	1.7360	1.6417	1.6469	15.83	6	1.6392	0	0.0000	0.0084	16.95	6	1.6392	0.0084
58	1.8484	1.7473	1.7524	15.89	6	1.7442	0	0.0000	0.0089	16.98	6	1.7442	0.0089
60	1.9639	1.8557	1.8606	15.94	6	1.8520	0	0.0000	0.0093	17.00	6	1.8520	0.0093

Total Height - 18 m				Sawlog Upper Diameter - 15 cm						Stump height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1394	0.0000	0.1322		0	0.0000	5	0.1272	0.0073	14.72	5	0.1272	0.0073
16	0.1787	0.0294	0.1703	1.84	0	0.0000	5	0.1632	0.0091	15.10	5	0.1632	0.0091
18	0.2222	0.1101	0.2123	5.54	2	0.1074	3	0.0957	0.0111	15.40	5	0.2031	0.0111
20	0.2699	0.1840	0.2582	8.03	3	0.1821	3	0.0759	0.0018	15.63	6	0.2580	0.0018
22	0.3215	0.2473	0.3077	9.43	3	0.2181	3	0.0890	0.0021	15.81	6	0.3071	0.0021
24	0.3769	0.3089	0.3608	10.37	3	0.2570	3	0.1028	0.0024	15.97	6	0.3598	0.0024
26	0.4362	0.3715	0.4175	11.07	4	0.3600	2	0.0561	0.0027	16.10	6	0.4160	0.0027
28	0.4991	0.4360	0.4775	11.63	4	0.4126	2	0.0631	0.0030	16.21	6	0.4757	0.0030
30	0.5656	0.5029	0.5409	12.08	4	0.4684	2	0.0703	0.0034	16.31	6	0.5387	0.0034
32	0.6356	0.5724	0.6076	12.45	4	0.5272	2	0.0778	0.0037	16.39	6	0.6050	0.0037
34	0.7091	0.6447	0.6776	12.77	4	0.5890	2	0.0856	0.0041	16.47	6	0.6745	0.0041
36	0.7861	0.7198	0.7507	13.05	5	0.7189	1	0.0283	0.0044	16.53	6	0.7472	0.0044
38	0.8664	0.7977	0.8269	13.29	5	0.7923	1	0.0307	0.0048	16.59	6	0.8231	0.0048
40	0.9501	0.8785	0.9062	13.50	5	0.8688	1	0.0332	0.0052	16.65	6	0.9019	0.0052
42	1.0371	0.9621	0.9885	13.69	5	0.9481	1	0.0357	0.0056	16.70	6	0.9838	0.0056
44	1.1274	1.0486	1.0738	13.86	5	1.0305	1	0.0383	0.0059	16.74	6	1.0687	0.0059
46	1.2209	1.1379	1.1621	14.02	5	1.1157	1	0.0409	0.0063	16.78	6	1.1566	0.0063
48	1.3176	1.2301	1.2533	14.16	5	1.2038	1	0.0436	0.0067	16.82	6	1.2474	0.0067
50	1.4175	1.3250	1.3474	14.29	5	1.2947	1	0.0463	0.0072	16.86	6	1.3410	0.0072
52	1.5205	1.4228	1.4444	14.41	5	1.3885	1	0.0491	0.0076	16.89	6	1.4376	0.0076
54	1.6267	1.5234	1.5442	14.52	5	1.4851	1	0.0519	0.0080	16.92	6	1.5370	0.0080
56	1.7360	1.6267	1.6469	14.62	5	1.5844	1	0.0548	0.0084	16.95	6	1.6392	0.0084
58	1.8484	1.7327	1.7524	14.72	5	1.6865	1	0.0577	0.0089	16.98	6	1.7442	0.0089
60	1.9639	1.8416	1.8606	14.81	5	1.7914	1	0.0606	0.0093	17.00	6	1.8520	0.0093

Jack Pine Sawlog and Pulp Volume Estimates

18 metre

Total Height - 18 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1394	0.0000	0.1322		0	0.0000	5	0.1272	0.0073	14.72	5	0.1272	0.0073
16	0.1787	0.0000	0.1703		0	0.0000	5	0.1632	0.0091	15.10	5	0.1632	0.0091
18	0.2222	0.0000	0.2123		0	0.0000	5	0.2031	0.0111	15.40	5	0.2031	0.0111
20	0.2699	0.0110	0.2582	0.64	0	0.0000	6	0.2580	0.0018	15.63	6	0.2580	0.0018
22	0.3215	0.0746	0.3077	2.42	0	0.0000	6	0.3071	0.0021	15.81	6	0.3071	0.0021
24	0.3769	0.1676	0.3608	4.73	1	0.1041	5	0.2558	0.0024	15.97	6	0.3598	0.0024
26	0.4362	0.2628	0.4175	6.71	2	0.2187	4	0.1973	0.0027	16.10	6	0.4160	0.0027
28	0.4991	0.3475	0.4775	8.05	3	0.3434	3	0.1323	0.0030	16.21	6	0.4757	0.0030
30	0.5656	0.4272	0.5409	9.00	3	0.3908	3	0.1480	0.0034	16.31	6	0.5387	0.0034
32	0.6356	0.5057	0.6076	9.73	3	0.4409	3	0.1642	0.0037	16.39	6	0.6050	0.0037
34	0.7091	0.5846	0.6776	10.32	3	0.4937	3	0.1809	0.0041	16.47	6	0.6745	0.0041
36	0.7861	0.6649	0.7507	10.80	4	0.6537	2	0.0935	0.0044	16.53	6	0.7472	0.0044
38	0.8664	0.7470	0.8269	11.21	4	0.7214	2	0.1017	0.0048	16.59	6	0.8231	0.0048
40	0.9501	0.8312	0.9062	11.57	4	0.7919	2	0.1100	0.0052	16.65	6	0.9019	0.0052
42	1.0371	0.9177	0.9885	11.87	4	0.8653	2	0.1186	0.0056	16.70	6	0.9838	0.0056
44	1.1274	1.0067	1.0738	12.15	4	0.9414	2	0.1273	0.0059	16.74	6	1.0687	0.0059
46	1.2209	1.0982	1.1621	12.39	4	1.0204	2	0.1362	0.0063	16.78	6	1.1566	0.0063
48	1.3176	1.1923	1.2533	12.61	4	1.1020	2	0.1453	0.0067	16.82	6	1.2474	0.0067
50	1.4175	1.2889	1.3474	12.81	4	1.1864	2	0.1546	0.0072	16.86	6	1.3410	0.0072
52	1.5205	1.3882	1.4444	12.99	4	1.2735	2	0.1640	0.0076	16.89	6	1.4376	0.0076
54	1.6267	1.4901	1.5442	13.16	5	1.4851	1	0.0519	0.0080	16.92	6	1.5370	0.0080
56	1.7360	1.5947	1.6469	13.31	5	1.5844	1	0.0548	0.0084	16.95	6	1.6392	0.0084
58	1.8484	1.7019	1.7524	13.45	5	1.6865	1	0.0577	0.0089	16.98	6	1.7442	0.0089
60	1.9639	1.8117	1.8606	13.58	5	1.7914	1	0.0606	0.0093	17.00	6	1.8520	0.0093

Total Height - 18 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1394	0.0000	0.1322		0	0.0000	5	0.1272	0.0073	14.72	5	0.1272	0.0073
16	0.1787	0.0000	0.1703		0	0.0000	5	0.1632	0.0091	15.10	5	0.1632	0.0091
18	0.2222	0.0000	0.2123		0	0.0000	5	0.2031	0.0111	15.40	5	0.2031	0.0111
20	0.2699	0.0000	0.2582		0	0.0000	6	0.2580	0.0018	15.63	6	0.2580	0.0018
22	0.3215	0.0000	0.3077		0	0.0000	6	0.3071	0.0021	15.81	6	0.3071	0.0021
24	0.3769	0.0000	0.3608		0	0.0000	6	0.3598	0.0024	15.97	6	0.3598	0.0024
26	0.4362	0.0521	0.4175	1.29	0	0.0000	6	0.4160	0.0027	16.10	6	0.4160	0.0027
28	0.4991	0.1314	0.4775	2.63	0	0.0000	6	0.4757	0.0030	16.21	6	0.4757	0.0030
30	0.5656	0.2322	0.5409	4.19	1	0.1622	5	0.3765	0.0034	16.31	6	0.5387	0.0034
32	0.6356	0.3413	0.6076	5.69	2	0.3261	4	0.2790	0.0037	16.39	6	0.6050	0.0037
34	0.7091	0.4456	0.6776	6.89	2	0.3663	4	0.3083	0.0041	16.47	6	0.6745	0.0041
36	0.7861	0.5443	0.7507	7.82	2	0.4087	4	0.3386	0.0044	16.53	6	0.7472	0.0044
38	0.8664	0.6399	0.8269	8.56	3	0.6072	3	0.2159	0.0048	16.59	6	0.8231	0.0048
40	0.9501	0.7345	0.9062	9.17	3	0.6679	3	0.2341	0.0052	16.65	6	0.9019	0.0052
42	1.0371	0.8291	0.9885	9.67	3	0.7311	3	0.2527	0.0056	16.70	6	0.9838	0.0056
44	1.1274	0.9247	1.0738	10.11	3	0.7969	3	0.2718	0.0059	16.74	6	1.0687	0.0059
46	1.2209	1.0216	1.1621	10.49	4	1.0204	2	0.1362	0.0063	16.78	6	1.1566	0.0063
48	1.3176	1.1203	1.2533	10.82	4	1.1020	2	0.1453	0.0067	16.82	6	1.2474	0.0067
50	1.4175	1.2210	1.3474	11.12	4	1.1864	2	0.1546	0.0072	16.86	6	1.3410	0.0072
52	1.5205	1.3237	1.4444	11.38	4	1.2735	2	0.1640	0.0076	16.89	6	1.4376	0.0076
54	1.6267	1.4287	1.5442	11.62	4	1.3633	2	0.1736	0.0080	16.92	6	1.5370	0.0080
56	1.7360	1.5359	1.6469	11.84	4	1.4558	2	0.1834	0.0084	16.95	6	1.6392	0.0084
58	1.8484	1.6455	1.7524	12.04	4	1.5508	2	0.1934	0.0089	16.98	6	1.7442	0.0089
60	1.9639	1.7576	1.8606	12.23	4	1.6485	2	0.2035	0.0093	17.00	6	1.8520	0.0093

Jack Pine Sawlog and Pulp Volume Estimates

18 metre

Total Height - 18 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1394	0.0000	0.1322		0	0.0000	5	0.1272	0.0073	14.72	5	0.1272	0.0073
16	0.1787	0.0000	0.1703		0	0.0000	5	0.1632	0.0091	15.10	5	0.1632	0.0091
18	0.2222	0.0000	0.2123		0	0.0000	5	0.2031	0.0111	15.40	5	0.2031	0.0111
20	0.2699	0.0000	0.2582		0	0.0000	6	0.2580	0.0018	15.63	6	0.2580	0.0018
22	0.3215	0.0000	0.3077		0	0.0000	6	0.3071	0.0021	15.81	6	0.3071	0.0021
24	0.3769	0.0000	0.3608		0	0.0000	6	0.3598	0.0024	15.97	6	0.3598	0.0024
26	0.4362	0.0000	0.4175		0	0.0000	6	0.4160	0.0027	16.10	6	0.4160	0.0027
28	0.4991	0.0000	0.4775		0	0.0000	6	0.4757	0.0030	16.21	6	0.4757	0.0030
30	0.5656	0.0332	0.5409	0.75	0	0.0000	6	0.5387	0.0034	16.31	6	0.5387	0.0034
32	0.6356	0.1070	0.6076	1.67	0	0.0000	6	0.6050	0.0037	16.39	6	0.6050	0.0037
34	0.7091	0.1977	0.6776	2.69	0	0.0000	6	0.6745	0.0041	16.47	6	0.6745	0.0041
36	0.7861	0.3049	0.7507	3.81	1	0.2330	5	0.5142	0.0044	16.53	6	0.7472	0.0044
38	0.8664	0.4222	0.8269	4.93	1	0.2595	5	0.5636	0.0048	16.59	6	0.8231	0.0048
40	0.9501	0.5411	0.9062	5.95	2	0.4999	4	0.4020	0.0052	16.65	6	0.9019	0.0052
42	1.0371	0.6570	0.9885	6.81	2	0.5487	4	0.4351	0.0056	16.70	6	0.9838	0.0056
44	1.1274	0.7698	1.0738	7.53	2	0.5997	4	0.4691	0.0059	16.74	6	1.0687	0.0059
46	1.2209	0.8807	1.1621	8.14	3	0.8652	3	0.2914	0.0063	16.78	6	1.1566	0.0063
48	1.3176	0.9906	1.2533	8.66	3	0.9360	3	0.3114	0.0067	16.82	6	1.2474	0.0067
50	1.4175	1.1006	1.3474	9.11	3	1.0093	3	0.3317	0.0072	16.86	6	1.3410	0.0072
52	1.5205	1.2111	1.4444	9.50	3	1.0851	3	0.3525	0.0076	16.89	6	1.4376	0.0076
54	1.6267	1.3227	1.5442	9.85	3	1.1633	3	0.3737	0.0080	16.92	6	1.5370	0.0080
56	1.7360	1.4358	1.6469	10.17	3	1.2439	3	0.3952	0.0084	16.95	6	1.6392	0.0084
58	1.8484	1.5504	1.7524	10.45	3	1.3270	3	0.4172	0.0089	16.98	6	1.7442	0.0089
60	1.9639	1.6669	1.8606	10.71	4	1.6485	2	0.2035	0.0093	17.00	6	1.8520	0.0093

Total Height - 18 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1394	0.0000	0.1322		0	0.0000	5	0.1272	0.0073	14.72	5	0.1272	0.0073
16	0.1787	0.0000	0.1703		0	0.0000	5	0.1632	0.0091	15.10	5	0.1632	0.0091
18	0.2222	0.0000	0.2123		0	0.0000	5	0.2031	0.0111	15.40	5	0.2031	0.0111
20	0.2699	0.0000	0.2582		0	0.0000	6	0.2580	0.0018	15.63	6	0.2580	0.0018
22	0.3215	0.0000	0.3077		0	0.0000	6	0.3071	0.0021	15.81	6	0.3071	0.0021
24	0.3769	0.0000	0.3608		0	0.0000	6	0.3598	0.0024	15.97	6	0.3598	0.0024
26	0.4362	0.0000	0.4175		0	0.0000	6	0.4160	0.0027	16.10	6	0.4160	0.0027
28	0.4991	0.0000	0.4775		0	0.0000	6	0.4757	0.0030	16.21	6	0.4757	0.0030
30	0.5656	0.0000	0.5409		0	0.0000	6	0.5387	0.0034	16.31	6	0.5387	0.0034
32	0.6356	0.0000	0.6076		0	0.0000	6	0.6050	0.0037	16.39	6	0.6050	0.0037
34	0.7091	0.0146	0.6776	0.45	0	0.0000	6	0.6745	0.0041	16.47	6	0.6745	0.0041
36	0.7861	0.0876	0.7507	1.15	0	0.0000	6	0.7472	0.0044	16.53	6	0.7472	0.0044
38	0.8664	0.1733	0.8269	1.89	0	0.0000	6	0.8231	0.0048	16.59	6	0.8231	0.0048
40	0.9501	0.2729	0.9062	2.69	0	0.0000	6	0.9019	0.0052	16.65	6	0.9019	0.0052
42	1.0371	0.3858	0.9885	3.53	1	0.3166	5	0.6672	0.0056	16.70	6	0.9838	0.0056
44	1.1274	0.5089	1.0738	4.39	1	0.3473	5	0.7215	0.0059	16.74	6	1.0687	0.0059
46	1.2209	0.6372	1.1621	5.22	1	0.3794	5	0.7772	0.0063	16.78	6	1.1566	0.0063
48	1.3176	0.7665	1.2533	5.97	2	0.7079	4	0.5395	0.0067	16.82	6	1.2474	0.0067
50	1.4175	0.8945	1.3474	6.64	2	0.7651	4	0.5759	0.0072	16.86	6	1.3410	0.0072
52	1.5205	1.0210	1.4444	7.23	2	0.8244	4	0.6132	0.0076	16.89	6	1.4376	0.0076
54	1.6267	1.1464	1.5442	7.74	2	0.8858	4	0.6512	0.0080	16.92	6	1.5370	0.0080
56	1.7360	1.2711	1.6469	8.20	3	1.2439	3	0.3952	0.0084	16.95	6	1.6392	0.0084
58	1.8484	1.3959	1.7524	8.60	3	1.3270	3	0.4172	0.0089	16.98	6	1.7442	0.0089
60	1.9639	1.5212	1.8606	8.97	3	1.4125	3	0.4395	0.0093	17.00	6	1.8520	0.0093

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.1394	0.0000	0.1322		0	0.0000	5	0.1272	0.0073	14.72	5	0.1272	0.0073
0.1787	0.0000	0.1703		0	0.0000	5	0.1632	0.0091	15.10	5	0.1632	0.0091
0.2222	0.0000	0.2123		0	0.0000	5	0.2031	0.0111	15.40	5	0.2031	0.0111
0.2699	0.0110	0.2582	0.64	0	0.0000	6	0.2580	0.0018	15.63	6	0.2580	0.0018
0.3215	0.0746	0.3077	2.42	0	0.0000	6	0.3071	0.0021	15.81	6	0.3071	0.0021
0.3769	0.1676	0.3608	4.73	1	0.1041	5	0.2558	0.0024	15.97	6	0.3598	0.0024
0.4362	0.2628	0.4175	6.71	2	0.2187	4	0.1973	0.0027	16.10	6	0.4160	0.0027
0.4991	0.3475	0.4775	8.05	3	0.3434	3	0.1323	0.0030	16.21	6	0.4757	0.0030
0.5656	0.4272	0.5409	9.00	3	0.3908	3	0.1480	0.0034	16.31	6	0.5387	0.0034
0.6356	0.5057	0.6076	9.73	3	0.4409	3	0.1642	0.0037	16.39	6	0.6050	0.0037
0.7091	0.5846	0.6776	10.32	3	0.4937	3	0.1809	0.0041	16.47	6	0.6745	0.0041
0.7861	0.6649	0.7507	10.80	4	0.6537	2	0.0935	0.0044	16.53	6	0.7472	0.0044
0.8664	0.7470	0.8269	11.21	4	0.7214	2	0.1017	0.0048	16.59	6	0.8231	0.0048
0.9501	0.8312	0.9062	11.57	4	0.7919	2	0.1100	0.0052	16.65	6	0.9019	0.0052
1.0371	0.9177	0.9885	11.87	4	0.8653	2	0.1186	0.0056	16.70	6	0.9838	0.0056
1.1274	1.0067	1.0738	12.15	4	0.9414	2	0.1273	0.0059	16.74	6	1.0687	0.0059
1.2209	1.0982	1.1621	12.39	4	1.0204	2	0.1362	0.0063	16.78	6	1.1568	0.0063
1.3176	1.1923	1.2533	12.61	4	1.1020	2	0.1453	0.0067	16.82	6	1.2474	0.0067
1.4175	1.2889	1.3474	12.81	4	1.1864	2	0.1546	0.0072	16.86	6	1.3410	0.0072
1.5205	1.3882	1.4444	12.99	4	1.2735	2	0.1640	0.0076	16.89	6	1.4376	0.0076
1.6267	1.4901	1.5442	13.16	5	1.4851	1	0.0519	0.0080	16.92	6	1.5370	0.0080
1.7360	1.5947	1.6469	13.31	5	1.5844	1	0.0548	0.0084	16.95	6	1.6392	0.0084
1.8484	1.7019	1.7524	13.45	5	1.6865	1	0.0577	0.0089	16.98	6	1.7442	0.0089
1.9639	1.8117	1.8606	13.58	5	1.7914	1	0.0606	0.0093	17.00	6	1.8520	0.0093

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.1394	0.0000	0.1322		0	0.0000	5	0.1272	0.0073	14.72	5	0.1272	0.0073
0.1787	0.0000	0.1703		0	0.0000	5	0.1632	0.0091	15.10	5	0.1632	0.0091
0.2222	0.0000	0.2123		0	0.0000	5	0.2031	0.0111	15.40	5	0.2031	0.0111
0.2699	0.0000	0.2582		0	0.0000	6	0.2580	0.0018	15.63	6	0.2580	0.0018
0.3215	0.0000	0.3077		0	0.0000	6	0.3071	0.0021	15.81	6	0.3071	0.0021
0.3769	0.0000	0.3608		0	0.0000	6	0.3598	0.0024	15.97	6	0.3598	0.0024
0.4362	0.0521	0.4175	1.29	0	0.0000	6	0.4160	0.0027	16.10	6	0.4160	0.0027
0.4991	0.1314	0.4775	2.63	0	0.0000	6	0.4757	0.0030	16.21	6	0.4757	0.0030
0.5656	0.2322	0.5409	4.19	1	0.1622	5	0.3765	0.0034	16.31	6	0.5387	0.0034
0.6356	0.3413	0.6076	5.69	2	0.3261	4	0.2790	0.0037	16.39	6	0.6050	0.0037
0.7091	0.4456	0.6776	6.89	2	0.3663	4	0.3083	0.0041	16.47	6	0.6745	0.0041
0.7861	0.5443	0.7507	7.82	2	0.4087	4	0.3386	0.0044	16.53	6	0.7472	0.0044
0.8664	0.6399	0.8269	8.56	3	0.6072	3	0.2159	0.0048	16.59	6	0.8231	0.0048
0.9501	0.7345	0.9062	9.17	3	0.6679	3	0.2341	0.0052	16.65	6	0.9019	0.0052
1.0371	0.8291	0.9885	9.67	3	0.7311	3	0.2527	0.0056	16.70	6	0.9838	0.0056
1.1274	0.9247	1.0738	10.11	3	0.7969	3	0.2718	0.0059	16.74	6	1.0687	0.0059
1.2209	1.0216	1.1621	10.49	4	1.0204	2	0.1362	0.0063	16.78	6	1.1568	0.0063
1.3176	1.1203	1.2533	10.82	4	1.1020	2	0.1453	0.0067	16.82	6	1.2474	0.0067
1.4175	1.2210	1.3474	11.12	4	1.1864	2	0.1546	0.0072	16.86	6	1.3410	0.0072
1.5205	1.3237	1.4444	11.38	4	1.2735	2	0.1640	0.0076	16.89	6	1.4376	0.0076
1.6267	1.4287	1.5442	11.62	4	1.3633	2	0.1736	0.0080	16.92	6	1.5370	0.0080
1.7360	1.5359	1.6469	11.84	4	1.4558	2	0.1834	0.0084	16.95	6	1.6392	0.0084
1.8484	1.6455	1.7524	12.04	4	1.5508	2	0.1934	0.0089	16.98	6	1.7442	0.0089
1.9639	1.7576	1.8606	12.23	4	1.6485	2	0.2035	0.0093	17.00	6	1.8520	0.0093

Jack Pine Sawlog and Pulp Volume Estimates

									Pulp & Unmerchantable Volume			
	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	[illegible]	[illegible]	[illegible]	[illegible]
	0.1394	0.0000	0.1322		0	0.0000	5	0.1272	0.0073	14.72	5	0.1272	0.0073
	0.1787	0.0000	0.1703		0	0.0000	5	0.1632	0.0091	15.10	5	0.1632	0.0091
	0.2222	0.0000	0.2123		0	0.0000	5	0.2031	0.0111	15.40	5	0.2031	0.0111
	0.2699	0.0000	0.2582		0	0.0000	6	0.2580	0.0018	15.63	6	0.2580	0.0018
	0.3215	0.0000	0.3077		0	0.0000	6	0.3071	0.0021	15.81	6	0.3071	0.0021
	0.3769	0.0000	0.3606		0	0.0000	6	0.3598	0.0024	15.97	6	0.3598	0.0024
	0.4362	0.0000	0.4175		0	0.0000	6	0.4160	0.0027	16.10	6	0.4160	0.0027
	0.4991	0.0000	0.4775		0	0.0000	6	0.4757	0.0030	16.21	6	0.4757	0.0030
	0.5656	0.0332	0.5409	0.75	0	0.0000	6	0.5387	0.0034	16.31	6	0.5387	0.0034
	0.6356	0.1070	0.6076	1.67	0	0.0000	6	0.6050	0.0037	16.39	6	0.6050	0.0037
	0.7091	0.1977	0.6776	2.69	0	0.0000	6	0.6745	0.0041	16.47	6	0.6745	0.0041
	0.7861	0.3049	0.7507	3.81	1	0.2330	5	0.5142	0.0044	16.53	6	0.7472	0.0044
	0.8664	0.4222	0.8269	4.93	1	0.2595	5	0.5636	0.0048	16.59	6	0.8231	0.0048
	0.9501	0.5411	0.9062	5.95	2	0.4999	4	0.4020	0.0052	16.65	6	0.9019	0.0052
	1.0371	0.6570	0.9885	6.81	2	0.5487	4	0.4351	0.0056	16.70	6	0.9836	0.0056
	1.1274	0.7698	1.0738	7.53	2	0.5997	4	0.4691	0.0059	16.74	6	1.0687	0.0059
	1.2209	0.8807	1.1621	8.14	3	0.8652	3	0.2914	0.0063	16.78	6	1.1566	0.0063
	1.3176	0.9906	1.2533	8.66	3	0.9360	3	0.3114	0.0067	16.82	6	1.2474	0.0067
	1.4175	1.1006	1.3474	9.11	3	1.0093	3	0.3317	0.0072	16.86	6	1.3410	0.0072
	1.5205	1.2111	1.4444	9.50	3	1.0851	3	0.3525	0.0076	16.89	6	1.4376	0.0076
	1.6267	1.3227	1.5442	9.85	3	1.1633	3	0.3737	0.0080	16.92	6	1.5370	0.0080
	1.7360	1.4358	1.6469	10.17	3	1.2439	3	0.3952	0.0084	16.95	6	1.6392	0.0084
	1.8484	1.5504	1.7524	10.45	3	1.3270	3	0.4172	0.0089	16.98	6	1.7442	0.0089
	1.9639	1.6669	1.8606	10.71	4	1.6485	2	0.2035	0.0093	17.00	6	1.8520	0.0093

[illegible] - 19 m												[illegible] - 0.2 m	
									Pulp & Unmerchantable Volume				
[illegible]	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	[illegible]	[illegible]	[illegible]	[illegible]
	0.1394	0.0000	0.1322		0	0.0000	5	0.1272	0.0073	14.72	5	0.1272	0.0073
	0.1787	0.0000	0.1703		0	0.0000	5	0.1632	0.0091	15.10	5	0.1632	0.0091
	0.2222	0.0000	0.2123		0	0.0000	5	0.2031	0.0111	15.40	5	0.2031	0.0111
	0.2699	0.0000	0.2582		0	0.0000	6	0.2580	0.0018	15.63	6	0.2580	0.0018
	0.3215	0.0000	0.3077		0	0.0000	6	0.3071	0.0021	15.81	6	0.3071	0.0021
	0.3769	0.0000	0.3606		0	0.0000	6	0.3598	0.0024	15.97	6	0.3598	0.0024
	0.4362	0.0000	0.4175		0	0.0000	6	0.4160	0.0027	16.10	6	0.4160	0.0027
	0.4991	0.0000	0.4775		0	0.0000	6	0.4757	0.0030	16.21	6	0.4757	0.0030
	0.5656	0.0000	0.5409		0	0.0000	6	0.5387	0.0034	16.31	6	0.5387	0.0034
	0.6356	0.0000	0.6076		0	0.0000	6	0.6050	0.0037	16.39	6	0.6050	0.0037
	0.7091	0.0146	0.6776	0.45	0	0.0000	6	0.6745	0.0041	16.47	6	0.6745	0.0041
	0.7861	0.0876	0.7507	1.15	0	0.0000	6	0.7472	0.0044	16.53	6	0.7472	0.0044
	0.8664	0.1733	0.8269	1.89	0	0.0000	6	0.8231	0.0048	16.59	6	0.8231	0.0048
	0.9501	0.2729	0.9062	2.69	0	0.0000	6	0.9019	0.0052	16.65	6	0.9019	0.0052
	1.0371	0.3858	0.9885	3.53	1	0.3166	5	0.6672	0.0056	16.70	6	0.9836	0.0056
	1.1274	0.5089	1.0738	4.39	1	0.3473	5	0.7215	0.0059	16.74	6	1.0687	0.0059
	1.2209	0.6372	1.1621	5.22	1	0.3794	5	0.7772	0.0063	16.78	6	1.1566	0.0063
	1.3176	0.7665	1.2533	5.97	2	0.7079	4	0.5395	0.0067	16.82	6	1.2474	0.0067
	1.4175	0.8945	1.3474	6.64	2	0.7651	4	0.5759	0.0072	16.86	6	1.3410	0.0072
	1.5205	1.0210	1.4444	7.23	2	0.8244	4	0.6132	0.0076	16.89	6	1.4376	0.0076
	1.6267	1.1464	1.5442	7.74	2	0.8858	4	0.6512	0.0080	16.92	6	1.5370	0.0080
	1.7360	1.2711	1.6469	8.20	3	1.2439	3	0.3952	0.0084	16.95	6	1.6392	0.0084
	1.8484	1.3959	1.7524	8.60	3	1.3270	3	0.4172	0.0089	16.98	6	1.7442	0.0089
	1.9639	1.5212	1.8606	8.97	3	1.4125	3	0.4395	0.0093	17.00	6	1.8520	0.0093

Jack Pine Sawlog and Pulp Volume Estimates

Total Height - 21 m

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.1990	0.1693	0.1905	12.42	4	0.1513	2	0.0356	0.0057	16.83	6	0.1870	0.0057
12	0.2475	0.2199	0.2376	13.43	5	0.2163	1	0.0163	0.0069	17.15	6	0.2326	0.0069
14	0.3007	0.2736	0.2890	14.16	5	0.2631	1	0.0194	0.0082	17.41	6	0.2825	0.0082
16	0.3582	0.3308	0.3445	14.71	5	0.3139	1	0.0227	0.0096	17.61	6	0.3366	0.0096
18	0.4200	0.3917	0.4041	15.14	5	0.3685	1	0.0261	0.0110	17.78	6	0.3946	0.0110
20	0.4860	0.4562	0.4675	15.50	5	0.4268	1	0.0297	0.0124	17.92	6	0.4565	0.0124
22	0.5560	0.5244	0.5349	15.80	6	0.5222	0	0.0000	0.0139	18.05	6	0.5222	0.0139
24	0.6301	0.5961	0.6059	16.05	6	0.5916	1	0.0141	0.0014	18.15	7	0.6057	0.0014
26	0.7080	0.6714	0.6806	16.27	6	0.6647	1	0.0156	0.0015	18.24	7	0.6802	0.0015
28	0.7897	0.7502	0.7586	16.46	6	0.7412	1	0.0171	0.0017	18.33	7	0.7583	0.0017
30	0.8752	0.8324	0.8406	16.62	6	0.8212	1	0.0186	0.0018	18.40	7	0.8398	0.0018
32	0.9644	0.9180	0.9258	16.77	6	0.9047	1	0.0202	0.0020	18.47	7	0.9249	0.0020
34	1.0572	1.0069	1.0144	16.91	6	0.9915	1	0.0218	0.0021	18.52	7	1.0133	0.0021
36	1.1536	1.0991	1.1063	17.03	6	1.0815	1	0.0234	0.0023	18.58	7	1.1050	0.0023
38	1.2535	1.1946	1.2015	17.14	6	1.1749	1	0.0251	0.0025	18.63	7	1.2000	0.0025
40	1.3570	1.2933	1.3000	17.24	6	1.2714	1	0.0268	0.0026	18.67	7	1.2982	0.0026
42	1.4639	1.3952	1.4016	17.33	6	1.3711	1	0.0286	0.0028	18.71	7	1.3997	0.0028
44	1.5742	1.5002	1.5064	17.41	6	1.4740	1	0.0303	0.0030	18.75	7	1.5043	0.0030
46	1.6879	1.6084	1.6143	17.49	6	1.5799	1	0.0321	0.0031	18.79	7	1.6120	0.0031
48	1.8050	1.7196	1.7254	17.56	6	1.6889	1	0.0339	0.0033	18.82	7	1.7229	0.0033
50	1.9254	1.8338	1.8394	17.63	6	1.8010	1	0.0358	0.0035	18.85	7	1.8367	0.0035
52	2.0492	1.9511	1.9566	17.69	6	1.9160	1	0.0377	0.0037	18.88	7	1.9537	0.0037
54	2.1762	2.0713	2.0767	17.75	6	2.0340	1	0.0396	0.0038	18.91	7	2.0736	0.0038

Total Height - 20 m | **Stump height - 0.3 m**

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.1990	0.0305	0.1905	1.91	0	0.0000	6	0.1870	0.0057	16.83	6	0.1870	0.0057
12	0.2475	0.1237	0.2376	6.23	2	0.1084	4	0.1242	0.0069	17.15	6	0.2326	0.0069
14	0.3007	0.2074	0.2890	9.06	3	0.1863	3	0.0963	0.0082	17.41	6	0.2825	0.0082
16	0.3582	0.2783	0.3445	10.61	4	0.2756	2	0.0610	0.0096	17.61	6	0.3366	0.0096
18	0.4200	0.3473	0.4041	11.66	4	0.3242	2	0.0704	0.0110	17.78	6	0.3946	0.0110
20	0.4860	0.4173	0.4675	12.43	4	0.3763	2	0.0803	0.0124	17.92	6	0.4565	0.0124
22	0.5560	0.4895	0.5349	13.04	5	0.4886	1	0.0334	0.0139	18.05	6	0.5222	0.0139
24	0.6301	0.5643	0.6059	13.53	5	0.5544	2	0.0514	0.0014	18.15	7	0.6057	0.0014
26	0.7080	0.6421	0.6806	13.94	5	0.6234	2	0.0568	0.0015	18.24	7	0.6802	0.0015
28	0.7897	0.7229	0.7586	14.29	5	0.6959	2	0.0624	0.0017	18.33	7	0.7583	0.0017
30	0.8752	0.8069	0.8406	14.59	5	0.7717	2	0.0682	0.0018	18.40	7	0.8398	0.0018
32	0.9644	0.8939	0.9258	14.86	5	0.8506	2	0.0740	0.0020	18.47	7	0.9249	0.0020
34	1.0572	0.9842	1.0144	15.09	5	0.9332	2	0.0801	0.0021	18.52	7	1.0133	0.0021
36	1.1536	1.0775	1.1063	15.30	5	1.0188	2	0.0862	0.0023	18.58	7	1.1050	0.0023
38	1.2535	1.1740	1.2015	15.49	5	1.1075	2	0.0925	0.0025	18.63	7	1.2000	0.0025
40	1.3570	1.2736	1.3000	15.66	6	1.2714	1	0.0268	0.0026	18.67	7	1.2982	0.0026
42	1.4639	1.3762	1.4016	15.81	6	1.3711	1	0.0286	0.0028	18.71	7	1.3997	0.0028
44	1.5742	1.4820	1.5064	15.95	6	1.4740	1	0.0303	0.0030	18.75	7	1.5043	0.0030
46	1.6879	1.5908	1.6143	16.08	6	1.5799	1	0.0321	0.0031	18.79	7	1.6120	0.0031
48	1.8050	1.7026	1.7254	16.20	6	1.6889	1	0.0339	0.0033	18.82	7	1.7229	0.0033
50	1.9254	1.8174	1.8394	16.32	6	1.8010	1	0.0358	0.0035	18.85	7	1.8367	0.0035
52	2.0492	1.9351	1.9566	16.42	6	1.9160	1	0.0377	0.0037	18.88	7	1.9537	0.0037
54	2.1762	2.0559	2.0767	16.52	6	2.0340	1	0.0396	0.0038	18.91	7	2.0736	0.0038

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.1990	0.0000	0.1905		0	0.0000	6	0.1870	0.0057	16.83	6	0.1870	0.0057
0.2475	0.0000	0.2376		0	0.0000	6	0.2326	0.0069	17.15	6	0.2326	0.0069
0.3007	0.0084	0.2890	0.56	0	0.0000	6	0.2825	0.0082	17.41	6	0.2825	0.0082
0.3582	0.0794	0.3445	2.58	0	0.0000	6	0.3366	0.0096	17.61	6	0.3366	0.0096
0.4200	0.1874	0.4041	5.30	1	0.1042	5	0.2904	0.0110	17.78	6	0.3946	0.0110
0.4860	0.2968	0.4675	7.60	2	0.2216	4	0.2349	0.0124	17.92	6	0.4565	0.0124
0.5560	0.3920	0.5349	9.10	3	0.3526	3	0.1695	0.0139	18.05	6	0.5222	0.0139
0.6301	0.4813	0.6059	10.16	3	0.4016	4	0.2040	0.0014	18.15	7	0.6057	0.0014
0.7080	0.5690	0.6806	10.97	4	0.5525	3	0.1277	0.0015	18.24	7	0.6802	0.0015
0.7897	0.6572	0.7588	11.61	4	0.6177	3	0.1406	0.0017	18.33	7	0.7583	0.0017
0.8752	0.7468	0.8406	12.14	4	0.6860	3	0.1538	0.0018	18.40	7	0.8398	0.0018
0.9644	0.8385	0.9258	12.59	4	0.7575	3	0.1674	0.0020	18.47	7	0.9249	0.0020
1.0572	0.9325	1.0144	12.98	4	0.8320	3	0.1813	0.0021	18.52	7	1.0133	0.0021
1.1536	1.0290	1.1063	13.32	5	1.0188	2	0.0862	0.0023	18.58	7	1.1050	0.0023
1.2535	1.1282	1.2015	13.61	5	1.1075	2	0.0925	0.0025	18.63	7	1.2000	0.0025
1.3570	1.2302	1.3000	13.86	5	1.1994	2	0.0989	0.0026	18.67	7	1.2982	0.0026
1.4639	1.3349	1.4016	14.12	5	1.2943	2	0.1054	0.0028	18.71	7	1.3997	0.0028
1.5742	1.4425	1.5064	14.33	5	1.3923	2	0.1120	0.0030	18.75	7	1.5043	0.0030
1.6879	1.5530	1.6143	14.53	5	1.4933	2	0.1188	0.0031	18.79	7	1.6120	0.0031
1.8050	1.6662	1.7254	14.71	5	1.5972	2	0.1256	0.0033	18.82	7	1.7229	0.0033
1.9254	1.7824	1.8394	14.88	5	1.7042	2	0.1326	0.0035	18.85	7	1.8367	0.0035
2.0492	1.9014	1.9566	15.03	5	1.8140	2	0.1396	0.0037	18.88	7	1.9537	0.0037
2.1762	2.0233	2.0767	15.17	5	1.9268	2	0.1468	0.0038	18.91	7	2.0736	0.0038

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.1990	0.0000	0.1905		0	0.0000	6	0.1870	0.0057	16.83	6	0.1870	0.0057
0.2475	0.0000	0.2376		0	0.0000	6	0.2326	0.0069	17.15	6	0.2326	0.0069
0.3007	0.0000	0.2890		0	0.0000	6	0.2825	0.0082	17.41	6	0.2825	0.0082
0.3582	0.0000	0.3445		0	0.0000	6	0.3366	0.0096	17.61	6	0.3366	0.0096
0.4200	0.0000	0.4041		0	0.0000	6	0.3946	0.0110	17.78	6	0.3946	0.0110
0.4860	0.0515	0.4675	1.29	0	0.0000	6	0.4565	0.0124	17.92	6	0.4565	0.0124
0.5560	0.1411	0.5349	2.83	0	0.0000	6	0.5222	0.0139	18.05	6	0.5222	0.0139
0.6301	0.2579	0.6059	4.67	1	0.1624	6	0.4433	0.0014	18.15	7	0.6057	0.0014
0.7080	0.3644	0.6806	6.43	2	0.3309	5	0.3493	0.0015	18.24	7	0.6802	0.0015
0.7897	0.5029	0.7588	7.81	2	0.3719	5	0.3864	0.0017	18.33	7	0.7583	0.0017
0.8752	0.6138	0.8406	8.85	3	0.5658	4	0.2740	0.0018	18.40	7	0.8398	0.0018
0.9644	0.7208	0.9258	9.68	3	0.6260	4	0.2988	0.0020	18.47	7	0.9249	0.0020
1.0572	0.8263	1.0144	10.34	3	0.6890	4	0.3243	0.0021	18.52	7	1.0133	0.0021
1.1536	0.9319	1.1063	10.90	4	0.9095	3	0.1955	0.0023	18.58	7	1.1050	0.0023
1.2535	1.0384	1.2015	11.38	4	0.9699	3	0.2101	0.0025	18.63	7	1.2000	0.0025
1.3570	1.1464	1.3000	11.79	4	1.0733	3	0.2249	0.0026	18.67	7	1.2982	0.0026
1.4639	1.2562	1.4016	12.16	4	1.1597	3	0.2400	0.0028	18.71	7	1.3997	0.0028
1.5742	1.3682	1.5064	12.48	4	1.2486	3	0.2555	0.0030	18.75	7	1.5043	0.0030
1.6879	1.4824	1.6143	12.77	4	1.3409	3	0.2712	0.0031	18.79	7	1.6120	0.0031
1.8050	1.5990	1.7254	13.04	5	1.5972	2	0.1256	0.0033	18.82	7	1.7229	0.0033
1.9254	1.7181	1.8394	13.28	5	1.7042	2	0.1326	0.0035	18.85	7	1.8367	0.0035
2.0492	1.8398	1.9566	13.49	5	1.8140	2	0.1396	0.0037	18.88	7	1.9537	0.0037
2.1762	1.9641	2.0767	13.70	5	1.9268	2	0.1468	0.0038	18.91	7	2.0736	0.0038

Jack Pine Sawlog and Pulp Volume Estimates

20 metre

Total Height - 20 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	5 cm upper dia.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.1990	0.1693	0.1905	12.42	4	0.1513	2	0.0356	0.0057	16.83	6	0.1870	0.0057
18	0.2475	0.2199	0.2376	13.43	5	0.2163	1	0.0163	0.0069	17.15	6	0.2326	0.0069
20	0.3007	0.2736	0.2890	14.16	5	0.2631	1	0.0194	0.0082	17.41	6	0.2825	0.0082
22	0.3582	0.3308	0.3445	14.71	5	0.3139	1	0.0227	0.0096	17.61	6	0.3366	0.0096
24	0.4200	0.3917	0.4041	15.14	5	0.3685	1	0.0261	0.0110	17.78	6	0.3946	0.0110
26	0.4860	0.4562	0.4675	15.50	5	0.4268	1	0.0297	0.0124	17.92	6	0.4565	0.0124
28	0.5560	0.5244	0.5349	15.80	6	0.5222	0	0.0000	0.0139	18.05	6	0.5222	0.0139
30	0.6301	0.5961	0.6059	16.05	6	0.5916	1	0.0141	0.0014	18.15	7	0.6057	0.0014
32	0.7080	0.6714	0.6806	16.27	6	0.6647	1	0.0156	0.0015	18.24	7	0.6802	0.0015
34	0.7897	0.7502	0.7588	16.46	6	0.7412	1	0.0171	0.0017	18.33	7	0.7583	0.0017
36	0.8752	0.8324	0.8406	16.62	6	0.8212	1	0.0186	0.0018	18.40	7	0.8398	0.0018
38	0.9644	0.9180	0.9258	16.77	6	0.9047	1	0.0202	0.0020	18.47	7	0.9249	0.0020
40	1.0572	1.0069	1.0144	16.91	6	0.9915	1	0.0218	0.0021	18.52	7	1.0133	0.0021
42	1.1536	1.0991	1.1063	17.03	6	1.0815	1	0.0234	0.0023	18.58	7	1.1050	0.0023
44	1.2535	1.1946	1.2015	17.14	6	1.1749	1	0.0251	0.0025	18.63	7	1.2000	0.0025
46	1.3570	1.2933	1.3000	17.24	6	1.2714	1	0.0268	0.0026	18.67	7	1.2982	0.0026
48	1.4639	1.3952	1.4016	17.33	6	1.3711	1	0.0286	0.0028	18.71	7	1.3997	0.0028
50	1.5742	1.5002	1.5064	17.41	6	1.4740	1	0.0303	0.0030	18.75	7	1.5043	0.0030
52	1.6879	1.6084	1.6143	17.49	6	1.5799	1	0.0321	0.0031	18.79	7	1.6120	0.0031
54	1.8050	1.7196	1.7254	17.56	6	1.6889	1	0.0339	0.0033	18.82	7	1.7229	0.0033
56	1.9254	1.8338	1.8394	17.63	6	1.8010	1	0.0358	0.0035	18.85	7	1.8367	0.0035
58	2.0492	1.9511	1.9566	17.69	6	1.9160	1	0.0377	0.0037	18.88	7	1.9537	0.0037
60	2.1762	2.0713	2.0767	17.75	6	2.0340	1	0.0396	0.0038	18.91	7	2.0736	0.0038

Total Height - 20 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	5 cm upper dia.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.1990	0.0305	0.1905	1.91	0	0.0000	6	0.1870	0.0057	16.83	6	0.1870	0.0057
18	0.2475	0.1237	0.2376	6.23	2	0.1084	4	0.1242	0.0069	17.15	6	0.2326	0.0069
20	0.3007	0.2074	0.2890	9.06	3	0.1863	3	0.0963	0.0082	17.41	6	0.2825	0.0082
22	0.3582	0.2783	0.3445	10.61	4	0.2756	2	0.0610	0.0096	17.61	6	0.3366	0.0096
24	0.4200	0.3473	0.4041	11.66	4	0.3242	2	0.0704	0.0110	17.78	6	0.3946	0.0110
26	0.4860	0.4173	0.4675	12.43	4	0.3763	2	0.0803	0.0124	17.92	6	0.4565	0.0124
28	0.5560	0.4895	0.5349	13.04	5	0.4888	1	0.0334	0.0139	18.05	6	0.5222	0.0139
30	0.6301	0.5643	0.6059	13.53	5	0.5544	2	0.0514	0.0014	18.15	7	0.6057	0.0014
32	0.7080	0.6421	0.6806	13.94	5	0.6234	2	0.0568	0.0015	18.24	7	0.6802	0.0015
34	0.7897	0.7229	0.7588	14.29	5	0.6959	2	0.0624	0.0017	18.33	7	0.7583	0.0017
36	0.8752	0.8069	0.8406	14.59	5	0.7717	2	0.0682	0.0018	18.40	7	0.8398	0.0018
38	0.9644	0.8939	0.9258	14.86	5	0.8508	2	0.0740	0.0020	18.47	7	0.9249	0.0020
40	1.0572	0.9842	1.0144	15.09	5	0.9332	2	0.0801	0.0021	18.52	7	1.0133	0.0021
42	1.1536	1.0775	1.1063	15.30	5	1.0188	2	0.0862	0.0023	18.58	7	1.1050	0.0023
44	1.2535	1.1740	1.2015	15.49	5	1.1075	2	0.0925	0.0025	18.63	7	1.2000	0.0025
46	1.3570	1.2736	1.3000	15.66	6	1.2714	1	0.0268	0.0026	18.67	7	1.2982	0.0026
48	1.4639	1.3762	1.4016	15.81	6	1.3711	1	0.0286	0.0028	18.71	7	1.3997	0.0028
50	1.5742	1.4820	1.5064	15.95	6	1.4740	1	0.0303	0.0030	18.75	7	1.5043	0.0030
52	1.6879	1.5908	1.6143	16.08	6	1.5799	1	0.0321	0.0031	18.79	7	1.6120	0.0031
54	1.8050	1.7026	1.7254	16.20	6	1.6889	1	0.0339	0.0033	18.82	7	1.7229	0.0033
56	1.9254	1.8174	1.8394	16.32	6	1.8010	1	0.0358	0.0035	18.85	7	1.8367	0.0035
58	2.0492	1.9351	1.9566	16.42	6	1.9160	1	0.0377	0.0037	18.88	7	1.9537	0.0037
60	2.1762	2.0559	2.0767	16.52	6	2.0340	1	0.0396	0.0038	18.91	7	2.0736	0.0038

Jack Pine Sawlog and Pulp Volume Estimates

20 metre

Total Height - 20 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.1990	0.0000	0.1905		0	0.0000	6	0.1870	0.0057	16.83	6	0.1870	0.0057
18	0.2475	0.0000	0.2376		0	0.0000	6	0.2326	0.0069	17.15	6	0.2326	0.0069
20	0.3007	0.0084	0.2890	0.56	0	0.0000	6	0.2825	0.0082	17.41	6	0.2825	0.0082
22	0.3582	0.0794	0.3445	2.58	0	0.0000	6	0.3366	0.0096	17.61	6	0.3366	0.0096
24	0.4200	0.1874	0.4041	5.30	1	0.1042	5	0.2904	0.0110	17.78	6	0.3946	0.0110
26	0.4860	0.2968	0.4675	7.60	2	0.2216	4	0.2349	0.0124	17.92	6	0.4565	0.0124
28	0.5560	0.3920	0.5349	9.10	3	0.3528	3	0.1695	0.0139	18.05	6	0.5222	0.0139
30	0.6301	0.4813	0.6059	10.16	3	0.4018	4	0.2040	0.0014	18.15	7	0.6057	0.0014
32	0.7080	0.5690	0.6806	10.97	4	0.5525	3	0.1277	0.0015	18.24	7	0.6802	0.0015
34	0.7897	0.6572	0.7588	11.61	4	0.6177	3	0.1406	0.0017	18.33	7	0.7583	0.0017
36	0.8752	0.7468	0.8406	12.14	4	0.6860	3	0.1538	0.0018	18.40	7	0.8398	0.0018
38	0.9644	0.8385	0.9258	12.59	4	0.7575	3	0.1674	0.0020	18.47	7	0.9249	0.0020
40	1.0572	0.9325	1.0144	12.98	4	0.8320	3	0.1813	0.0021	18.52	7	1.0133	0.0021
42	1.1536	1.0290	1.1063	13.32	5	1.0188	2	0.0862	0.0023	18.58	7	1.1050	0.0023
44	1.2535	1.1282	1.2015	13.61	5	1.1075	2	0.0925	0.0025	18.63	7	1.2000	0.0025
46	1.3570	1.2302	1.3000	13.88	5	1.1994	2	0.0989	0.0026	18.67	7	1.2982	0.0026
48	1.4639	1.3349	1.4016	14.12	5	1.2943	2	0.1054	0.0028	18.71	7	1.3997	0.0028
50	1.5742	1.4425	1.5064	14.33	5	1.3923	2	0.1120	0.0030	18.75	7	1.5043	0.0030
52	1.6879	1.5530	1.6143	14.53	5	1.4933	2	0.1188	0.0031	18.79	7	1.6120	0.0031
54	1.8050	1.6662	1.7254	14.71	5	1.5972	2	0.1256	0.0033	18.82	7	1.7229	0.0033
56	1.9254	1.7824	1.8394	14.88	5	1.7042	2	0.1326	0.0035	18.85	7	1.8367	0.0035
58	2.0492	1.9014	1.9566	15.03	5	1.8140	2	0.1396	0.0037	18.88	7	1.9537	0.0037
60	2.1762	2.0233	2.0767	15.17	5	1.9268	2	0.1468	0.0038	18.91	7	2.0736	0.0038

Total Height - 20 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.1990	0.0000	0.1905		0	0.0000	6	0.1870	0.0057	16.83	6	0.1870	0.0057
18	0.2475	0.0000	0.2376		0	0.0000	6	0.2326	0.0069	17.15	6	0.2326	0.0069
20	0.3007	0.0000	0.2890		0	0.0000	6	0.2825	0.0082	17.41	6	0.2825	0.0082
22	0.3582	0.0000	0.3445		0	0.0000	6	0.3366	0.0096	17.61	6	0.3366	0.0096
24	0.4200	0.0000	0.4041		0	0.0000	6	0.3946	0.0110	17.78	6	0.3946	0.0110
26	0.4860	0.0515	0.4675	1.29	0	0.0000	6	0.4565	0.0124	17.92	6	0.4565	0.0124
28	0.5560	0.1411	0.5349	2.83	0	0.0000	6	0.5222	0.0139	18.05	6	0.5222	0.0139
30	0.6301	0.2579	0.6059	4.67	1	0.1624	6	0.4433	0.0014	18.15	7	0.6057	0.0014
32	0.7080	0.3844	0.6806	6.43	2	0.3309	5	0.3493	0.0015	18.24	7	0.6802	0.0015
34	0.7897	0.5029	0.7588	7.81	2	0.3719	5	0.3864	0.0017	18.33	7	0.7583	0.0017
36	0.8752	0.6138	0.8406	8.85	3	0.5658	4	0.2740	0.0018	18.40	7	0.8398	0.0018
38	0.9644	0.7208	0.9258	9.68	3	0.6260	4	0.2988	0.0020	18.47	7	0.9249	0.0020
40	1.0572	0.8263	1.0144	10.34	3	0.6890	4	0.3243	0.0021	18.52	7	1.0133	0.0021
42	1.1536	0.9319	1.1063	10.90	4	0.9095	3	0.1955	0.0023	18.58	7	1.1050	0.0023
44	1.2535	1.0384	1.2015	11.38	4	0.9899	3	0.2101	0.0025	18.63	7	1.2000	0.0025
46	1.3570	1.1464	1.3000	11.79	4	1.0733	3	0.2249	0.0026	18.67	7	1.2982	0.0026
48	1.4639	1.2562	1.4016	12.16	4	1.1597	3	0.2400	0.0028	18.71	7	1.3997	0.0028
50	1.5742	1.3682	1.5064	12.48	4	1.2488	3	0.2555	0.0030	18.75	7	1.5043	0.0030
52	1.6879	1.4824	1.6143	12.77	4	1.3409	3	0.2712	0.0031	18.79	7	1.6120	0.0031
54	1.8050	1.5990	1.7254	13.04	5	1.5972	2	0.1256	0.0033	18.82	7	1.7229	0.0033
56	1.9254	1.7181	1.8394	13.28	5	1.7042	2	0.1326	0.0035	18.85	7	1.8367	0.0035
58	2.0492	1.8398	1.9566	13.49	5	1.8140	2	0.1396	0.0037	18.88	7	1.9537	0.0037
60	2.1762	1.9641	2.0767	13.70	5	1.9268	2	0.1468	0.0038	18.91	7	2.0736	0.0038

Jack Pine Sawlog and Pulp Volume Estimates

20 metre

Total Height - 20 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume					Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.1990	0.0000	0.1905		0	0.0000	6	0.1870	0.0057	16.83	6	0.1870	0.0057
18	0.2475	0.0000	0.2376		0	0.0000	6	0.2326	0.0069	17.15	6	0.2326	0.0069
20	0.3007	0.0000	0.2890		0	0.0000	6	0.2825	0.0082	17.41	6	0.2825	0.0082
22	0.3582	0.0000	0.3445		0	0.0000	6	0.3366	0.0096	17.61	6	0.3366	0.0096
24	0.4200	0.0000	0.4041		0	0.0000	6	0.3946	0.0110	17.78	6	0.3946	0.0110
26	0.4860	0.0000	0.4675		0	0.0000	6	0.4565	0.0124	17.92	6	0.4565	0.0124
28	0.5560	0.0000	0.5349		0	0.0000	6	0.5222	0.0139	18.05	6	0.5222	0.0139
30	0.6301	0.0276	0.6059	0.68	0	0.0000	7	0.6057	0.0014	18.15	7	0.6057	0.0014
32	0.7080	0.1099	0.6806	1.72	0	0.0000	7	0.6802	0.0015	18.24	7	0.6802	0.0015
34	0.7897	0.2128	0.7588	2.90	1	0.2083	6	0.5499	0.0017	18.33	7	0.7583	0.0017
36	0.8752	0.3365	0.8406	4.22	1	0.2334	6	0.6064	0.0018	18.40	7	0.8398	0.0018
38	0.9644	0.4725	0.9258	5.55	2	0.4606	5	0.4642	0.0020	18.47	7	0.9249	0.0020
40	1.0572	0.6088	1.0144	6.73	2	0.5083	5	0.5050	0.0021	18.52	7	1.0133	0.0021
42	1.1536	0.7401	1.1063	7.71	2	0.5581	5	0.5468	0.0023	18.58	7	1.1050	0.0023
44	1.2535	0.8668	1.2015	8.52	3	0.8229	4	0.3771	0.0025	18.63	7	1.2000	0.0025
46	1.3570	0.9907	1.3000	9.20	3	0.8938	4	0.4044	0.0026	18.67	7	1.2982	0.0026
48	1.4639	1.1134	1.4016	9.78	3	0.9673	4	0.4324	0.0028	18.71	7	1.3997	0.0028
50	1.5742	1.2358	1.5064	10.27	3	1.0434	4	0.4609	0.0030	18.75	7	1.5043	0.0030
52	1.6879	1.3588	1.6143	10.71	4	1.3409	3	0.2712	0.0031	18.79	7	1.6120	0.0031
54	1.8050	1.4828	1.7254	11.09	4	1.4357	3	0.2871	0.0033	18.82	7	1.7229	0.0033
56	1.9254	1.6083	1.8394	11.44	4	1.5334	3	0.3034	0.0035	18.85	7	1.8367	0.0035
58	2.0492	1.7355	1.9566	11.75	4	1.6338	3	0.3199	0.0037	18.88	7	1.9537	0.0037
60	2.1762	1.8646	2.0767	12.03	4	1.7369	3	0.3367	0.0038	18.91	7	2.0736	0.0038

Total Height - 20 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume					Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.1990	0.0000	0.1905		0	0.0000	6	0.1870	0.0057	16.83	6	0.1870	0.0057
18	0.2475	0.0000	0.2376		0	0.0000	6	0.2326	0.0069	17.15	6	0.2326	0.0069
20	0.3007	0.0000	0.2890		0	0.0000	6	0.2825	0.0082	17.41	6	0.2825	0.0082
22	0.3582	0.0000	0.3445		0	0.0000	6	0.3366	0.0096	17.61	6	0.3366	0.0096
24	0.4200	0.0000	0.4041		0	0.0000	6	0.3946	0.0110	17.78	6	0.3946	0.0110
26	0.4860	0.0000	0.4675		0	0.0000	6	0.4565	0.0124	17.92	6	0.4565	0.0124
28	0.5560	0.0000	0.5349		0	0.0000	6	0.5222	0.0139	18.05	6	0.5222	0.0139
30	0.6301	0.0000	0.6059		0	0.0000	7	0.6057	0.0014	18.15	7	0.6057	0.0014
32	0.7080	0.0000	0.6806		0	0.0000	7	0.6802	0.0015	18.24	7	0.6802	0.0015
34	0.7897	0.0034	0.7588	0.34	0	0.0000	7	0.7583	0.0017	18.33	7	0.7583	0.0017
36	0.8752	0.0844	0.8406	1.13	0	0.0000	7	0.8398	0.0018	18.40	7	0.8398	0.0018
38	0.9644	0.1806	0.9258	1.98	0	0.0000	7	0.9249	0.0020	18.47	7	0.9249	0.0020
40	1.0572	0.2937	1.0144	2.90	1	0.2878	6	0.7254	0.0021	18.52	7	1.0133	0.0021
42	1.1536	0.4233	1.1063	3.89	1	0.3171	6	0.7878	0.0023	18.58	7	1.1050	0.0023
44	1.2535	0.5655	1.2015	4.91	1	0.3479	6	0.8521	0.0025	18.63	7	1.2000	0.0025
46	1.3570	0.7130	1.3000	5.88	2	0.6644	5	0.6339	0.0026	18.67	7	1.2982	0.0026
48	1.4639	0.8604	1.4016	6.75	2	0.7207	5	0.6790	0.0028	18.71	7	1.3997	0.0028
50	1.5742	1.0051	1.5064	7.51	2	0.7792	5	0.7251	0.0030	18.75	7	1.5043	0.0030
52	1.6879	1.1471	1.6143	8.18	3	1.1221	4	0.4899	0.0031	18.79	7	1.6120	0.0031
54	1.8050	1.2872	1.7254	8.75	3	1.2033	4	0.5195	0.0033	18.82	7	1.7229	0.0033
56	1.9254	1.4262	1.8394	9.26	3	1.2871	4	0.5496	0.0035	18.85	7	1.8367	0.0035
58	2.0492	1.5650	1.9566	9.71	3	1.3734	4	0.5803	0.0037	18.88	7	1.9537	0.0037
60	2.1762	1.7040	2.0767	10.11	3	1.4621	4	0.6115	0.0038	18.91	7	2.0736	0.0038

Jack Pine Sawlog and Pulp Volume Estimates

22 metre

Total Height - 22 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3319	0.3035	0.3202	15.66	6	0.3026	1	0.0146	0.0050	19.19	7	0.3172	0.0050
22	0.3955	0.3671	0.3819	16.26	6	0.3608	1	0.0171	0.0058	19.41	7	0.3779	0.0058
24	0.4639	0.4346	0.4480	16.74	6	0.4234	1	0.0197	0.0066	19.60	7	0.4430	0.0066
26	0.5368	0.5063	0.5185	17.13	6	0.4902	1	0.0223	0.0075	19.75	7	0.5126	0.0075
28	0.6142	0.5819	0.5933	17.45	6	0.5612	1	0.0251	0.0084	19.89	7	0.5863	0.0084
30	0.6960	0.6616	0.6722	17.73	6	0.6362	1	0.0280	0.0094	20.00	7	0.6642	0.0094
32	0.7821	0.7452	0.7551	17.96	6	0.7151	1	0.0310	0.0103	20.10	7	0.7461	0.0103
34	0.8724	0.8326	0.8420	18.17	7	0.8319	0	0.0000	0.0113	20.19	7	0.8319	0.0113
36	0.9667	0.9238	0.9327	18.35	7	0.9216	0	0.0000	0.0123	20.27	7	0.9216	0.0123
38	1.0651	1.0188	1.0273	18.51	7	1.0150	0	0.0000	0.0134	20.34	7	1.0150	0.0134
40	1.1675	1.1174	1.1255	18.66	7	1.1122	0	0.0000	0.0144	20.41	7	1.1122	0.0144
42	1.2737	1.2197	1.2275	18.79	7	1.2130	0	0.0000	0.0155	20.46	7	1.2130	0.0155
44	1.3838	1.3255	1.3330	18.91	7	1.3173	0	0.0000	0.0166	20.52	7	1.3173	0.0166
46	1.4977	1.4349	1.4420	19.02	7	1.4252	0	0.0000	0.0178	20.57	7	1.4252	0.0178
48	1.6154	1.5477	1.5546	19.11	7	1.5366	0	0.0000	0.0189	20.61	7	1.5366	0.0189
50	1.7367	1.6639	1.6706	19.21	7	1.6514	1	0.0191	0.0010	20.65	8	1.6705	0.0010
52	1.8617	1.7835	1.7900	19.29	7	1.7696	1	0.0202	0.0010	20.69	8	1.7898	0.0010
54	1.9903	1.9065	1.9127	19.37	7	1.8912	1	0.0213	0.0011	20.73	8	1.9125	0.0011
56	2.1225	2.0327	2.0388	19.44	7	2.0160	1	0.0225	0.0011	20.76	8	2.0385	0.0011
58	2.2582	2.1622	2.1682	19.51	7	2.1441	1	0.0237	0.0012	20.79	8	2.1678	0.0012
60	2.3974	2.2950	2.3008	19.57	7	2.2755	1	0.0248	0.0013	20.82	8	2.3003	0.0013

Total Height - 22 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3319	0.2314	0.3202	10.12	3	0.1895	4	0.1277	0.0050	19.19	7	0.3172	0.0050
22	0.3955	0.3100	0.3819	11.82	4	0.2842	3	0.0936	0.0058	19.41	7	0.3779	0.0058
24	0.4639	0.3864	0.4480	12.96	4	0.3347	3	0.1083	0.0066	19.60	7	0.4430	0.0066
26	0.5368	0.4641	0.5185	13.80	5	0.4489	2	0.0636	0.0075	19.75	7	0.5126	0.0075
28	0.6142	0.5442	0.5933	14.46	5	0.5146	2	0.0717	0.0084	19.89	7	0.5863	0.0084
30	0.6960	0.6272	0.6722	15.00	5	0.5841	2	0.0801	0.0094	20.00	7	0.6642	0.0094
32	0.7821	0.7135	0.7551	15.45	5	0.6574	2	0.0887	0.0103	20.10	7	0.7461	0.0103
34	0.8724	0.8032	0.8420	15.83	6	0.7979	1	0.0340	0.0113	20.19	7	0.8319	0.0113
36	0.9667	0.8963	0.9327	16.16	6	0.8844	1	0.0372	0.0123	20.27	7	0.9216	0.0123
38	1.0651	0.9928	1.0273	16.44	6	0.9747	1	0.0404	0.0134	20.34	7	1.0150	0.0134
40	1.1675	1.0928	1.1255	16.70	6	1.0685	1	0.0436	0.0144	20.41	7	1.1122	0.0144
42	1.2737	1.1963	1.2275	16.92	6	1.1660	1	0.0470	0.0155	20.46	7	1.2130	0.0155
44	1.3838	1.3032	1.3330	17.13	6	1.2669	1	0.0504	0.0166	20.52	7	1.3173	0.0166
46	1.4977	1.4135	1.4420	17.31	6	1.3714	1	0.0539	0.0178	20.57	7	1.4252	0.0178
48	1.6154	1.5272	1.5546	17.48	6	1.4792	1	0.0574	0.0189	20.61	7	1.5366	0.0189
50	1.7367	1.6442	1.6706	17.63	6	1.5904	2	0.0801	0.0010	20.65	8	1.6705	0.0010
52	1.8617	1.7645	1.7900	17.77	6	1.7050	2	0.0849	0.0010	20.69	8	1.7898	0.0010
54	1.9903	1.8881	1.9127	17.90	6	1.8228	2	0.0897	0.0011	20.73	8	1.9125	0.0011
56	2.1225	2.0149	2.0388	18.02	6	1.9439	2	0.0946	0.0011	20.76	8	2.0385	0.0011
58	2.2582	2.1450	2.1682	18.13	7	2.1441	1	0.0237	0.0012	20.79	8	2.1678	0.0012
60	2.3974	2.2783	2.3008	18.23	7	2.2755	1	0.0248	0.0013	20.82	8	2.3003	0.0013

Jack Pine Sawlog and Pulp Volume Estimates

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.1990	0.0000	0.1905		0	0.0000	6	0.1870	0.0057	16.83	6	0.1870	0.0057
	0.2475	0.0000	0.2376		0	0.0000	6	0.2326	0.0069	17.15	6	0.2326	0.0069
	0.3007	0.0000	0.2890		0	0.0000	6	0.2825	0.0082	17.41	6	0.2825	0.0082
	0.3582	0.0000	0.3445		0	0.0000	6	0.3366	0.0096	17.61	6	0.3366	0.0096
	0.4200	0.0000	0.4041		0	0.0000	6	0.3946	0.0110	17.78	6	0.3946	0.0110
	0.4860	0.0000	0.4675		0	0.0000	6	0.4565	0.0124	17.92	6	0.4565	0.0124
	0.5560	0.0000	0.5349		0	0.0000	6	0.5222	0.0139	18.05	6	0.5222	0.0139
	0.6301	0.0276	0.6059	0.68	0	0.0000	7	0.6057	0.0014	18.15	7	0.6057	0.0014
	0.7080	0.1099	0.6806	1.72	0	0.0000	7	0.6802	0.0015	18.24	7	0.6802	0.0015
	0.7897	0.2128	0.7588	2.90	1	0.2083	6	0.5499	0.0017	18.33	7	0.7583	0.0017
	0.8752	0.3365	0.8406	4.22	1	0.2334	6	0.6064	0.0018	18.40	7	0.8398	0.0018
	0.9644	0.4725	0.9258	5.55	2	0.4606	5	0.4642	0.0020	18.47	7	0.9249	0.0020
	1.0572	0.6088	1.0144	6.73	2	0.5083	5	0.5050	0.0021	18.52	7	1.0133	0.0021
	1.1536	0.7401	1.1063	7.71	2	0.5581	5	0.5468	0.0023	18.58	7	1.1050	0.0023
	1.2535	0.8668	1.2015	8.52	3	0.8229	4	0.3771	0.0025	18.63	7	1.2000	0.0025
	1.3570	0.9907	1.3000	9.20	3	0.8938	4	0.4044	0.0026	18.67	7	1.2982	0.0026
	1.4639	1.1134	1.4016	9.78	3	0.9673	4	0.4324	0.0028	18.71	7	1.3997	0.0028
	1.5742	1.2358	1.5064	10.27	3	1.0434	4	0.4609	0.0030	18.75	7	1.5043	0.0030
	1.6879	1.3588	1.6143	10.71	4	1.3409	3	0.2712	0.0031	18.79	7	1.6120	0.0031
	1.8050	1.4826	1.7254	11.09	4	1.4357	3	0.2871	0.0033	18.82	7	1.7229	0.0033
	1.9254	1.6083	1.8394	11.44	4	1.5334	3	0.3034	0.0035	18.85	7	1.8367	0.0035
	2.0492	1.7355	1.9566	11.75	4	1.6338	3	0.3199	0.0037	18.88	7	1.9537	0.0037
	2.1762	1.8646	2.0767	12.03	4	1.7369	3	0.3367	0.0038	18.91	7	2.0736	0.0038

Total Height - 20 m	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.1990	0.0000	0.1905		0	0.0000	6	0.1870	0.0057	16.83	6	0.1870	0.0057
	0.2475	0.0000	0.2376		0	0.0000	6	0.2326	0.0069	17.15	6	0.2326	0.0069
	0.3007	0.0000	0.2890		0	0.0000	6	0.2825	0.0082	17.41	6	0.2825	0.0082
	0.3582	0.0000	0.3445		0	0.0000	6	0.3366	0.0096	17.61	6	0.3366	0.0096
	0.4200	0.0000	0.4041		0	0.0000	6	0.3946	0.0110	17.78	6	0.3946	0.0110
	0.4860	0.0000	0.4675		0	0.0000	6	0.4565	0.0124	17.92	6	0.4565	0.0124
	0.5560	0.0000	0.5349		0	0.0000	6	0.5222	0.0139	18.05	6	0.5222	0.0139
	0.6301	0.0000	0.6059		0	0.0000	7	0.6057	0.0014	18.15	7	0.6057	0.0014
	0.7080	0.0000	0.6806		0	0.0000	7	0.6802	0.0015	18.24	7	0.6802	0.0015
	0.7897	0.0034	0.7588	0.34	0	0.0000	7	0.7583	0.0017	18.33	7	0.7583	0.0017
	0.8752	0.0844	0.8406	1.13	0	0.0000	7	0.8398	0.0018	18.40	7	0.8398	0.0018
	0.9644	0.1806	0.9258	1.98	0	0.0000	7	0.9249	0.0020	18.47	7	0.9249	0.0020
	1.0572	0.2937	1.0144	2.90	1	0.2876	6	0.7254	0.0021	18.52	7	1.0133	0.0021
	1.1536	0.4233	1.1063	3.89	1	0.3171	6	0.7878	0.0023	18.58	7	1.1050	0.0023
	1.2535	0.5655	1.2015	4.91	1	0.3479	6	0.8521	0.0025	18.63	7	1.2000	0.0025
	1.3570	0.7130	1.3000	5.89	2	0.6644	5	0.6331	0.0026	18.67	7	1.2982	0.0026
	1.4639	0.8604	1.4016	6.75	2	0.7207	5	0.6790	0.0028	18.71	7	1.3997	0.0028
	1.5742	1.0051	1.5064	7.51	2	0.7792	5	0.7251	0.0030	18.75	7	1.5043	0.0030
	1.6879	1.1471	1.6143	8.18	3	1.1221	4	0.4892	0.0031	18.79	7	1.6120	0.0031
	1.8050	1.2872	1.7254	8.75	3	1.2033	4	0.5195	0.0033	18.82	7	1.7229	0.0033
	1.9254	1.4262	1.8394	9.26	3	1.2871	4	0.5496	0.0035	18.85	7	1.8367	0.0035
	2.0492	1.5650	1.9566	9.71	3	1.3734	4	0.5803	0.0037	18.88	7	1.9537	0.0037
	2.1762	1.7040	2.0767	10.11	3	1.4621	4	0.6115	0.0038	18.91	7	2.0736	0.0038

Jack Pine Sawlog and Pulp Volume Estimates

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 9 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.3319	0.3035	0.3202	15.66	6	0.3026	1	0.0146	0.0050	19.19	7	0.3172	0.0050
11	0.3955	0.3671	0.3819	16.26	6	0.3608	1	0.0171	0.0058	19.41	7	0.3779	0.0058
12	0.4639	0.4346	0.4480	16.74	6	0.4234	1	0.0197	0.0066	19.60	7	0.4430	0.0066
13	0.5368	0.5063	0.5185	17.13	6	0.4902	1	0.0223	0.0075	19.75	7	0.5126	0.0075
14	0.6142	0.5819	0.5933	17.45	6	0.5612	1	0.0251	0.0084	19.89	7	0.5863	0.0084
15	0.6960	0.6616	0.6722	17.73	6	0.6362	1	0.0280	0.0094	20.00	7	0.6642	0.0094
16	0.7821	0.7452	0.7551	17.96	6	0.7151	1	0.0310	0.0103	20.10	7	0.7461	0.0103
17	0.8724	0.8326	0.8420	18.17	7	0.8319	0	0.0000	0.0113	20.19	7	0.8319	0.0113
18	0.9667	0.9238	0.9327	18.35	7	0.9216	0	0.0000	0.0123	20.27	7	0.9216	0.0123
19	1.0651	1.0188	1.0273	18.51	7	1.0150	0	0.0000	0.0134	20.34	7	1.0150	0.0134
20	1.1675	1.1174	1.1255	18.66	7	1.1122	0	0.0000	0.0144	20.41	7	1.1122	0.0144
21	1.2737	1.2197	1.2275	18.79	7	1.2130	0	0.0000	0.0155	20.46	7	1.2130	0.0155
22	1.3838	1.3255	1.3330	18.91	7	1.3173	0	0.0000	0.0166	20.52	7	1.3173	0.0166
23	1.4977	1.4349	1.4420	19.02	7	1.4252	0	0.0000	0.0178	20.57	7	1.4252	0.0178
24	1.6154	1.5477	1.5546	19.11	7	1.5366	0	0.0000	0.0189	20.61	7	1.5366	0.0189
25	1.7367	1.6639	1.6706	19.21	7	1.6514	1	0.0191	0.0010	20.65	8	1.6705	0.0010
26	1.8617	1.7835	1.7900	19.29	7	1.7696	1	0.0202	0.0010	20.69	8	1.7898	0.0010
27	1.9903	1.9065	1.9127	19.37	7	1.8912	1	0.0213	0.0011	20.73	8	1.9125	0.0011
28	2.1225	2.0327	2.0388	19.44	7	2.0160	1	0.0225	0.0011	20.76	8	2.0385	0.0011
29	2.2582	2.1622	2.1682	19.51	7	2.1441	1	0.0237	0.0012	20.79	8	2.1678	0.0012
30	2.3974	2.2950	2.3008	19.57	7	2.2755	1	0.0248	0.0013	20.82	8	2.3003	0.0013

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 9 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.3319	0.2314	0.3202	10.12	3	0.1895	4	0.1277	0.0050	19.19	7	0.3172	0.0050
11	0.3955	0.3100	0.3819	11.82	4	0.2842	3	0.0936	0.0058	19.41	7	0.3779	0.0058
12	0.4639	0.3864	0.4480	12.96	4	0.3347	3	0.1083	0.0066	19.60	7	0.4430	0.0066
13	0.5368	0.4641	0.5185	13.80	5	0.4489	2	0.0636	0.0075	19.75	7	0.5126	0.0075
14	0.6142	0.5442	0.5933	14.46	5	0.5146	2	0.0717	0.0084	19.89	7	0.5863	0.0084
15	0.6960	0.6272	0.6722	15.00	5	0.5841	2	0.0801	0.0094	20.00	7	0.6642	0.0094
16	0.7821	0.7135	0.7551	15.45	5	0.6574	2	0.0887	0.0103	20.10	7	0.7461	0.0103
17	0.8724	0.8032	0.8420	15.83	6	0.7979	1	0.0340	0.0113	20.19	7	0.8319	0.0113
18	0.9667	0.8963	0.9327	16.16	6	0.8844	1	0.0372	0.0123	20.27	7	0.9216	0.0123
19	1.0651	0.9928	1.0273	16.44	6	0.9747	1	0.0404	0.0134	20.34	7	1.0150	0.0134
20	1.1675	1.0928	1.1255	16.70	6	1.0685	1	0.0436	0.0144	20.41	7	1.1122	0.0144
21	1.2737	1.1963	1.2275	16.92	6	1.1660	1	0.0470	0.0155	20.46	7	1.2130	0.0155
22	1.3838	1.3032	1.3330	17.13	6	1.2669	1	0.0504	0.0166	20.52	7	1.3173	0.0166
23	1.4977	1.4135	1.4420	17.31	6	1.3714	1	0.0539	0.0178	20.57	7	1.4252	0.0178
24	1.6154	1.5272	1.5546	17.48	6	1.4792	1	0.0574	0.0189	20.61	7	1.5366	0.0189
25	1.7367	1.6442	1.6705	17.63	6	1.5904	2	0.0801	0.0010	20.65	8	1.6705	0.0010
26	1.8617	1.7645	1.7900	17.77	6	1.7050	2	0.0849	0.0010	20.69	8	1.7898	0.0010
27	1.9903	1.8881	1.9127	17.90	6	1.8228	2	0.0897	0.0011	20.73	8	1.9125	0.0011
28	2.1225	2.0149	2.0388	18.02	6	1.9439	2	0.0946	0.0011	20.76	8	2.0385	0.0011
29	2.2582	2.1450	2.1682	18.13	7	2.1441	1	0.0237	0.0012	20.79	8	2.1678	0.0012
30	2.3974	2.2783	2.3008	18.23	7	2.2755	1	0.0248	0.0013	20.82	8	2.3003	0.0013

Jack Pine Sawlog and Pulp Volume Estimates

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
20	0.3319	0.0058	0.3202	0.48	0	0.0000	7	0.3172	0.0050	19.19	7	0.3172	0.0050
22	0.3955	0.0844	0.3819	2.73	0	0.0000	7	0.3779	0.0058	19.41	7	0.3779	0.0058
24	0.4639	0.2084	0.4480	5.91	2	0.1916	5	0.2514	0.0066	19.60	7	0.4430	0.0066
26	0.5368	0.3323	0.5185	8.53	3	0.3129	4	0.1997	0.0075	19.75	7	0.5126	0.0075
28	0.6142	0.4382	0.5933	10.19	3	0.3602	4	0.2261	0.0084	19.89	7	0.5863	0.0084
30	0.6960	0.5371	0.6722	11.35	4	0.5079	3	0.1563	0.0094	20.00	7	0.6642	0.0094
32	0.7821	0.6343	0.7551	12.23	4	0.5726	3	0.1735	0.0103	20.10	7	0.7461	0.0103
34	0.8724	0.7320	0.8420	12.93	4	0.6407	3	0.1912	0.0113	20.19	7	0.8319	0.0113
36	0.9667	0.8313	0.9327	13.50	5	0.8148	2	0.1067	0.0123	20.27	7	0.9216	0.0123
38	1.0651	0.9326	1.0273	13.99	5	0.8989	2	0.1161	0.0134	20.34	7	1.0150	0.0134
40	1.1675	1.0370	1.1255	14.41	5	0.9865	2	0.1257	0.0144	20.41	7	1.1122	0.0144
42	1.2737	1.1439	1.2275	14.78	5	1.0775	2	0.1355	0.0155	20.46	7	1.2130	0.0155
44	1.3838	1.2538	1.3330	15.10	5	1.1718	2	0.1455	0.0166	20.52	7	1.3173	0.0166
46	1.4977	1.3666	1.4420	15.39	5	1.2695	2	0.1557	0.0178	20.57	7	1.4252	0.0178
48	1.6154	1.4825	1.5546	15.64	6	1.4792	1	0.0574	0.0189	20.61	7	1.5366	0.0189
50	1.7367	1.6015	1.6706	15.86	6	1.5904	2	0.0801	0.0010	20.65	8	1.6705	0.0010
52	1.8617	1.7236	1.7900	16.09	6	1.7050	2	0.0849	0.0010	20.69	8	1.7898	0.0010
54	1.9903	1.8488	1.9127	16.29	6	1.8228	2	0.0897	0.0011	20.73	8	1.9125	0.0011
56	2.1225	1.9771	2.0388	16.47	6	1.9439	2	0.0946	0.0011	20.76	8	2.0385	0.0011
58	2.2582	2.1085	2.1682	16.63	6	2.0682	2	0.0996	0.0012	20.79	8	2.1678	0.0012
60	2.3974	2.2430	2.3008	16.78	6	2.1956	2	0.1047	0.0013	20.82	8	2.3003	0.0013

Total Height - 22 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
20	0.3319	0.0000	0.3202		0	0.0000	7	0.3172	0.0050	19.19	7	0.3172	0.0050
22	0.3955	0.0000	0.3819		0	0.0000	7	0.3779	0.0058	19.41	7	0.3779	0.0058
24	0.4639	0.0000	0.4480		0	0.0000	7	0.4430	0.0066	19.60	7	0.4430	0.0066
26	0.5368	0.0511	0.5185	1.29	0	0.0000	7	0.5126	0.0075	19.75	7	0.5126	0.0075
28	0.6142	0.1512	0.5933	3.03	1	0.1418	6	0.4445	0.0084	19.89	7	0.5863	0.0084
30	0.6960	0.2654	0.6722	5.17	1	0.1627	6	0.5015	0.0094	20.00	7	0.6642	0.0094
32	0.7821	0.4302	0.7551	7.22	2	0.3350	5	0.4111	0.0103	20.10	7	0.7461	0.0103
34	0.8724	0.5631	0.8420	8.77	3	0.5202	4	0.3117	0.0113	20.19	7	0.8319	0.0113
36	0.9667	0.6864	0.9327	9.92	3	0.5794	4	0.3422	0.0123	20.27	7	0.9216	0.0123
38	1.0651	0.8050	1.0273	10.82	4	0.7867	3	0.2283	0.0134	20.34	7	1.0150	0.0134
40	1.1675	0.9218	1.1255	11.55	4	0.8646	3	0.2475	0.0144	20.41	7	1.1122	0.0144
42	1.2737	1.0386	1.2275	12.16	4	0.9457	3	0.2673	0.0155	20.46	7	1.2130	0.0155
44	1.3838	1.1564	1.3330	12.68	4	1.0299	3	0.2874	0.0166	20.52	7	1.3173	0.0166
46	1.4977	1.2759	1.4420	13.13	5	1.2695	2	0.1557	0.0178	20.57	7	1.4252	0.0178
48	1.6154	1.3973	1.5546	13.52	5	1.3705	2	0.1662	0.0189	20.61	7	1.5366	0.0189
50	1.7367	1.5211	1.6706	13.87	5	1.4747	3	0.1958	0.0010	20.65	8	1.6705	0.0010
52	1.8617	1.6473	1.7900	14.19	5	1.5821	3	0.2077	0.0010	20.69	8	1.7898	0.0010
54	1.9903	1.7761	1.9127	14.47	5	1.6927	3	0.2198	0.0011	20.73	8	1.9125	0.0011
56	2.1225	1.9077	2.0388	14.73	5	1.8064	3	0.2321	0.0011	20.76	8	2.0385	0.0011
58	2.2582	2.0419	2.1682	14.97	5	1.9232	3	0.2445	0.0012	20.79	8	2.1678	0.0012
60	2.3974	2.1790	2.3008	15.19	5	2.0431	3	0.2572	0.0013	20.82	8	2.3003	0.0013

Jack Pine Sawlog and Pulp Volume Estimates

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.3319	0.0000	0.3202		0	0.0000	7	0.3172	0.0050	19.19	7	0.3172	0.0050
11	0.3955	0.0000	0.3819		0	0.0000	7	0.3779	0.0058	19.41	7	0.3779	0.0058
12	0.4639	0.0000	0.4480		0	0.0000	7	0.4430	0.0066	19.60	7	0.4430	0.0066
13	0.5368	0.0000	0.5185		0	0.0000	7	0.5126	0.0075	19.75	7	0.5126	0.0075
14	0.6142	0.0000	0.5933		0	0.0000	7	0.5863	0.0084	19.89	7	0.5863	0.0084
15	0.6960	0.0220	0.6722	0.61	0	0.0000	7	0.6642	0.0094	20.00	7	0.6642	0.0094
16	0.7821	0.1132	0.7551	1.77	0	0.0000	7	0.7461	0.0103	20.10	7	0.7461	0.0103
17	0.8724	0.2268	0.8420	3.12	1	0.2087	6	0.6232	0.0113	20.19	7	0.8319	0.0113
18	0.9667	0.3704	0.9327	4.65	1	0.2338	6	0.6878	0.0123	20.27	7	0.9216	0.0123
19	1.0651	0.5267	1.0273	6.20	2	0.4668	5	0.5482	0.0134	20.34	7	1.0150	0.0134
20	1.1675	0.6812	1.1255	7.56	2	0.5154	5	0.5968	0.0144	20.41	7	1.1122	0.0144
21	1.2737	0.8282	1.2275	8.66	3	0.7740	4	0.4389	0.0155	20.46	7	1.2130	0.0155
22	1.3838	0.9691	1.3330	9.56	3	0.8445	4	0.4728	0.0166	20.52	7	1.3173	0.0166
23	1.4977	1.1064	1.4420	10.31	3	0.9177	4	0.5075	0.0178	20.57	7	1.4252	0.0178
24	1.6154	1.2421	1.5546	10.93	4	1.2076	3	0.3290	0.0189	20.61	7	1.5366	0.0189
25	1.7367	1.3774	1.6706	11.48	4	1.3010	4	0.3695	0.0010	20.65	8	1.6705	0.0010
26	1.8617	1.5132	1.7900	11.95	4	1.3974	4	0.3925	0.0010	20.69	8	1.7898	0.0010
27	1.9903	1.6501	1.9127	12.37	4	1.4967	4	0.4158	0.0011	20.73	8	1.9125	0.0011
28	2.1225	1.7886	2.0388	12.74	4	1.5990	4	0.4395	0.0011	20.76	8	2.0385	0.0011
29	2.2582	1.9289	2.1682	13.08	5	1.9232	3	0.2445	0.0012	20.79	8	2.1678	0.0012
30	2.3974	2.0713	2.3008	13.39	5	2.0431	3	0.2572	0.0013	20.82	8	2.3003	0.0013

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.3319	0.0000	0.3202		0	0.0000	7	0.3172	0.0050	19.19	7	0.3172	0.0050
11	0.3955	0.0000	0.3819		0	0.0000	7	0.3779	0.0058	19.41	7	0.3779	0.0058
12	0.4639	0.0000	0.4480		0	0.0000	7	0.4430	0.0066	19.60	7	0.4430	0.0066
13	0.5368	0.0000	0.5185		0	0.0000	7	0.5126	0.0075	19.75	7	0.5126	0.0075
14	0.6142	0.0000	0.5933		0	0.0000	7	0.5863	0.0084	19.89	7	0.5863	0.0084
15	0.6960	0.0000	0.6722		0	0.0000	7	0.6642	0.0094	20.00	7	0.6642	0.0094
16	0.7821	0.0000	0.7551		0	0.0000	7	0.7461	0.0103	20.10	7	0.7461	0.0103
17	0.8724	0.0000	0.8420		0	0.0000	7	0.8319	0.0113	20.19	7	0.8319	0.0113
18	0.9667	0.0815	0.9327	1.10	0	0.0000	7	0.9216	0.0123	20.27	7	0.9216	0.0123
19	1.0651	0.1885	1.0273	2.07	0	0.0000	7	1.0150	0.0134	20.34	7	1.0150	0.0134
20	1.1675	0.3159	1.1255	3.12	1	0.2883	6	0.8239	0.0144	20.41	7	1.1122	0.0144
21	1.2737	0.4638	1.2275	4.27	1	0.3177	6	0.8953	0.0155	20.46	7	1.2130	0.0155
22	1.3838	0.6267	1.3330	5.46	2	0.6191	5	0.6982	0.0166	20.52	7	1.3173	0.0166
23	1.4977	0.7950	1.4420	6.58	2	0.6743	5	0.7509	0.0178	20.57	7	1.4252	0.0178
24	1.6154	0.9613	1.5546	7.58	2	0.7317	5	0.8049	0.0189	20.61	7	1.5366	0.0189
25	1.7367	1.1231	1.6706	8.44	3	1.0722	5	0.5983	0.0010	20.65	8	1.6705	0.0010
26	1.8617	1.2811	1.7900	9.17	3	1.1535	5	0.6363	0.0010	20.69	8	1.7898	0.0010
27	1.9903	1.4363	1.9127	9.81	3	1.2374	5	0.6751	0.0011	20.73	8	1.9125	0.0011
28	2.1225	1.5901	2.0388	10.37	3	1.3240	5	0.7145	0.0011	20.76	8	2.0385	0.0011
29	2.2582	1.7433	2.1682	10.86	4	1.7042	4	0.4636	0.0012	20.79	8	2.1678	0.0012
30	2.3974	1.8967	2.3008	11.29	4	1.8123	4	0.4880	0.0013	20.82	8	2.3003	0.0013

Jack Pine Sawlog and Pulp Volume Estimates

22 metre

Total Height - 22 m				Sawlog Upper Diameter - 20 cm						Stump height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3319	0.0058	0.3202	0.48	0	0.0000	7	0.3172	0.0050	19.19	7	0.3172	0.0050
22	0.3955	0.0844	0.3819	2.73	0	0.0000	7	0.3779	0.0058	19.41	7	0.3779	0.0058
24	0.4639	0.2084	0.4480	5.91	2	0.1916	5	0.2514	0.0066	19.60	7	0.4430	0.0066
26	0.5368	0.3323	0.5185	8.53	3	0.3129	4	0.1997	0.0075	19.75	7	0.5126	0.0075
28	0.6142	0.4382	0.5933	10.19	3	0.3602	4	0.2261	0.0084	19.89	7	0.5863	0.0084
30	0.6960	0.5371	0.6722	11.35	4	0.5079	3	0.1563	0.0094	20.00	7	0.6642	0.0094
32	0.7821	0.6343	0.7551	12.23	4	0.5726	3	0.1735	0.0103	20.10	7	0.7461	0.0103
34	0.8724	0.7320	0.8420	12.93	4	0.6407	3	0.1912	0.0113	20.19	7	0.8319	0.0113
36	0.9667	0.8313	0.9327	13.50	5	0.8148	2	0.1067	0.0123	20.27	7	0.9216	0.0123
38	1.0651	0.9328	1.0273	13.99	5	0.8989	2	0.1161	0.0134	20.34	7	1.0150	0.0134
40	1.1675	1.0370	1.1255	14.41	5	0.9865	2	0.1257	0.0144	20.41	7	1.1122	0.0144
42	1.2737	1.1439	1.2275	14.78	5	1.0775	2	0.1355	0.0155	20.46	7	1.2130	0.0155
44	1.3838	1.2538	1.3330	15.10	5	1.1718	2	0.1455	0.0166	20.52	7	1.3173	0.0166
46	1.4977	1.3666	1.4420	15.39	5	1.2695	2	0.1557	0.0178	20.57	7	1.4252	0.0178
48	1.6154	1.4825	1.5546	15.64	6	1.4792	1	0.0574	0.0189	20.61	7	1.5366	0.0189
50	1.7367	1.6015	1.6706	15.88	6	1.5904	2	0.0801	0.0010	20.65	8	1.6705	0.0010
52	1.8617	1.7236	1.7900	16.09	6	1.7050	2	0.0849	0.0010	20.69	8	1.7898	0.0010
54	1.9903	1.8488	1.9127	16.29	6	1.8228	2	0.0897	0.0011	20.73	8	1.9125	0.0011
56	2.1225	1.9771	2.0388	16.47	6	1.9439	2	0.0946	0.0011	20.76	8	2.0385	0.0011
58	2.2582	2.1085	2.1682	16.63	6	2.0682	2	0.0996	0.0012	20.79	8	2.1678	0.0012
60	2.3974	2.2430	2.3008	16.78	6	2.1956	2	0.1047	0.0013	20.82	8	2.3003	0.0013

Total Height - 22 m				Sawlog Upper Diameter - 25 cm						Stump height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3319	0.0000	0.3202		0	0.0000	7	0.3172	0.0050	19.19	7	0.3172	0.0050
22	0.3955	0.0000	0.3819		0	0.0000	7	0.3779	0.0058	19.41	7	0.3779	0.0058
24	0.4639	0.0000	0.4480		0	0.0000	7	0.4430	0.0066	19.60	7	0.4430	0.0066
26	0.5368	0.0511	0.5185	1.29	0	0.0000	7	0.5126	0.0075	19.75	7	0.5126	0.0075
28	0.6142	0.1512	0.5933	3.03	1	0.1418	6	0.4445	0.0084	19.89	7	0.5863	0.0084
30	0.6960	0.2854	0.6722	5.17	1	0.1627	6	0.5015	0.0094	20.00	7	0.6642	0.0094
32	0.7821	0.4302	0.7551	7.22	2	0.3350	5	0.4111	0.0103	20.10	7	0.7461	0.0103
34	0.8724	0.5631	0.8420	8.77	3	0.5202	4	0.3117	0.0113	20.19	7	0.8319	0.0113
36	0.9667	0.6864	0.9327	9.92	3	0.5794	4	0.3422	0.0123	20.27	7	0.9216	0.0123
38	1.0651	0.8050	1.0273	10.82	4	0.7867	3	0.2283	0.0134	20.34	7	1.0150	0.0134
40	1.1675	0.9218	1.1255	11.55	4	0.8646	3	0.2475	0.0144	20.41	7	1.1122	0.0144
42	1.2737	1.0386	1.2275	12.16	4	0.9457	3	0.2673	0.0155	20.46	7	1.2130	0.0155
44	1.3838	1.1564	1.3330	12.68	4	1.0299	3	0.2874	0.0166	20.52	7	1.3173	0.0166
46	1.4977	1.2759	1.4420	13.13	5	1.2695	2	0.1557	0.0178	20.57	7	1.4252	0.0178
48	1.6154	1.3973	1.5546	13.52	5	1.3705	2	0.1662	0.0189	20.61	7	1.5366	0.0189
50	1.7367	1.5211	1.6706	13.87	5	1.4747	3	0.1958	0.0010	20.65	8	1.6705	0.0010
52	1.8617	1.6473	1.7900	14.19	5	1.5821	3	0.2077	0.0010	20.69	8	1.7898	0.0010
54	1.9903	1.7761	1.9127	14.47	5	1.6927	3	0.2198	0.0011	20.73	8	1.9125	0.0011
56	2.1225	1.9077	2.0388	14.73	5	1.8064	3	0.2321	0.0011	20.76	8	2.0385	0.0011
58	2.2582	2.0419	2.1682	14.97	5	1.9232	3	0.2445	0.0012	20.79	8	2.1678	0.0012
60	2.3974	2.1790	2.3008	15.19	5	2.0431	3	0.2572	0.0013	20.82	8	2.3003	0.0013

Jack Pine Sawlog and Pulp Volume Estimates

Total Height - 22 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m** | 22 metre

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3319	0.0000	0.3202		0	0.0000	7	0.3172	0.0050	19.19	7	0.3172	0.0050
22	0.3955	0.0000	0.3819		0	0.0000	7	0.3779	0.0058	19.41	7	0.3779	0.0058
24	0.4639	0.0000	0.4480		0	0.0000	7	0.4430	0.0066	19.60	7	0.4430	0.0066
26	0.5368	0.0000	0.5185		0	0.0000	7	0.5126	0.0075	19.75	7	0.5126	0.0075
28	0.6142	0.0000	0.5933		0	0.0000	7	0.5363	0.0084	19.89	7	0.5863	0.0084
30	0.6960	0.0220	0.6722	0.61	0	0.0000	7	0.6642	0.0094	20.00	7	0.6642	0.0094
32	0.7821	0.1132	0.7551	1.77	0	0.0000	7	0.7461	0.0103	20.10	7	0.7461	0.0103
34	0.8724	0.2288	0.8420	3.12	1	0.2087	6	0.6232	0.0113	20.19	7	0.8319	0.0113
36	0.9667	0.3704	0.9327	4.65	1	0.2338	6	0.6878	0.0123	20.27	7	0.9216	0.0123
38	1.0651	0.5267	1.0273	6.20	2	0.4668	5	0.5482	0.0134	20.34	7	1.0150	0.0134
40	1.1675	0.6812	1.1255	7.56	2	0.5154	5	0.5968	0.0144	20.41	7	1.1122	0.0144
42	1.2737	0.8282	1.2275	8.66	3	0.7740	4	0.4389	0.0155	20.46	7	1.2130	0.0155
44	1.3838	0.9691	1.3330	9.56	3	0.8445	4	0.4728	0.0166	20.52	7	1.3173	0.0166
46	1.4977	1.1064	1.4420	10.31	3	0.9177	4	0.5075	0.0178	20.57	7	1.4252	0.0178
48	1.6154	1.2421	1.5546	10.93	4	1.2076	3	0.3290	0.0189	20.61	7	1.5366	0.0189
50	1.7367	1.3774	1.6706	11.48	4	1.3010	4	0.3695	0.0010	20.65	8	1.6705	0.0010
52	1.8617	1.5132	1.7900	11.95	4	1.3974	4	0.3925	0.0010	20.69	8	1.7898	0.0010
54	1.9903	1.6501	1.9127	12.37	4	1.4967	4	0.4158	0.0011	20.73	8	1.9125	0.0011
56	2.1225	1.7886	2.0388	12.74	4	1.5990	4	0.4395	0.0011	20.76	8	2.0385	0.0011
58	2.2582	1.9289	2.1682	13.08	5	1.9232	3	0.2445	0.0012	20.79	8	2.1678	0.0012
60	2.3974	2.0713	2.3008	13.39	5	2.0431	3	0.2572	0.0013	20.82	8	2.3003	0.0013

Total Height - 22 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3319	0.0000	0.3202		0	0.0000	7	0.3172	0.0050	19.19	7	0.3172	0.0050
22	0.3955	0.0000	0.3819		0	0.0000	7	0.3779	0.0058	19.41	7	0.3779	0.0058
24	0.4639	0.0000	0.4480		0	0.0000	7	0.4430	0.0066	19.60	7	0.4430	0.0066
26	0.5368	0.0000	0.5185		0	0.0000	7	0.5126	0.0075	19.75	7	0.5126	0.0075
28	0.6142	0.0000	0.5933		0	0.0000	7	0.5863	0.0084	19.89	7	0.5863	0.0084
30	0.6960	0.0000	0.6722		0	0.0000	7	0.6642	0.0094	20.00	7	0.6642	0.0094
32	0.7821	0.0000	0.7551		0	0.0000	7	0.7461	0.0103	20.10	7	0.7461	0.0103
34	0.8724	0.0000	0.8420		0	0.0000	7	0.8319	0.0113	20.19	7	0.8319	0.0113
36	0.9667	0.0815	0.9327	1.10	0	0.0000	7	0.9216	0.0123	20.27	7	0.9216	0.0123
38	1.0651	0.1885	1.0273	2.07	0	0.0000	7	1.0150	0.0134	20.34	7	1.0150	0.0134
40	1.1675	0.3159	1.1255	3.12	1	0.2883	6	0.8239	0.0144	20.41	7	1.1122	0.0144
42	1.2737	0.4638	1.2275	4.27	1	0.3177	6	0.8953	0.0155	20.46	7	1.2130	0.0155
44	1.3838	0.6267	1.3330	5.46	2	0.6191	5	0.6982	0.0166	20.52	7	1.3173	0.0166
46	1.4977	0.7950	1.4420	6.58	2	0.6743	5	0.7509	0.0178	20.57	7	1.4252	0.0178
48	1.6154	0.9613	1.5546	7.58	2	0.7317	5	0.8049	0.0189	20.61	7	1.5366	0.0189
50	1.7367	1.1231	1.6706	8.44	3	1.0722	5	0.5983	0.0010	20.65	8	1.6705	0.0010
52	1.8617	1.2811	1.7900	9.17	3	1.1535	5	0.6363	0.0010	20.69	8	1.7898	0.0010
54	1.9903	1.4363	1.9127	9.81	3	1.2374	5	0.6751	0.0011	20.73	8	1.9125	0.0011
56	2.1225	1.5901	2.0388	10.37	3	1.3240	5	0.7145	0.0011	20.76	8	2.0385	0.0011
58	2.2582	1.7433	2.1682	10.86	4	1.7042	4	0.4636	0.0012	20.79	8	2.1678	0.0012
60	2.3974	1.8967	2.3008	11.29	4	1.8123	4	0.4880	0.0013	20.82	8	2.3003	0.0013

Jack Pine Sawlog and Pulp Volume Estimates

24 metre

Total Height - 24 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5083	0.4782	0.4926	18.34	7	0.4760	1	0.0145	0.0038	21.42	8	0.4905	0.0038
26	0.5884	0.5571	0.5703	18.76	7	0.5511	1	0.0165	0.0043	21.59	8	0.5676	0.0043
28	0.6734	0.6405	0.6526	19.11	7	0.6308	1	0.0185	0.0048	21.73	8	0.6493	0.0048
30	0.7632	0.7282	0.7396	19.41	7	0.7150	1	0.0207	0.0054	21.85	8	0.7357	0.0054
32	0.8577	0.8203	0.8310	19.67	7	0.8036	1	0.0229	0.0059	21.96	8	0.8264	0.0059
34	0.9567	0.9167	0.9267	19.89	7	0.8965	1	0.0251	0.0065	22.06	8	0.9215	0.0065
36	1.0603	1.0172	1.0267	20.09	7	0.9935	1	0.0274	0.0071	22.14	8	1.0209	0.0071
38	1.1682	1.1218	1.1309	20.26	7	1.0947	1	0.0298	0.0077	22.22	8	1.1244	0.0077
40	1.2804	1.2305	1.2392	20.42	7	1.1998	1	0.0322	0.0083	22.29	8	1.2320	0.0083
42	1.3969	1.3431	1.3514	20.56	7	1.3090	1	0.0346	0.0089	22.35	8	1.3436	0.0089
44	1.5176	1.4596	1.4676	20.68	8	1.4591	0	0.0000	0.0096	22.41	8	1.4591	0.0096
46	1.6423	1.5800	1.5877	20.80	8	1.5785	0	0.0000	0.0102	22.46	8	1.5785	0.0102
48	1.7712	1.7041	1.7115	20.91	8	1.7017	0	0.0000	0.0109	22.51	8	1.7017	0.0109
50	1.9040	1.8320	1.8392	21.00	8	1.8286	0	0.0000	0.0115	22.56	8	1.8286	0.0115
52	2.0407	1.9635	1.9705	21.09	8	1.9592	0	0.0000	0.0122	22.60	8	1.9592	0.0122
54	2.1814	2.0987	2.1055	21.18	8	2.0935	0	0.0000	0.0129	22.64	8	2.0935	0.0129
56	2.3259	2.2375	2.2440	21.26	8	2.2314	0	0.0000	0.0136	22.67	8	2.2314	0.0136
58	2.4742	2.3798	2.3862	21.33	8	2.3729	0	0.0000	0.0143	22.71	8	2.3728	0.0143
60	2.6263	2.5257	2.5319	21.40	8	2.5177	0	0.0000	0.0150	22.74	8	2.5177	0.0150

Total Height - 24 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5083	0.4263	0.4926	14.27	5	0.4019	3	0.0886	0.0038	21.42	8	0.4905	0.0038
26	0.5884	0.5117	0.5703	15.19	5	0.4665	3	0.1011	0.0043	21.59	8	0.5676	0.0043
28	0.6734	0.5998	0.6526	15.90	6	0.5932	2	0.0561	0.0048	21.73	8	0.6493	0.0048
30	0.7632	0.6913	0.7396	16.48	6	0.6730	2	0.0626	0.0054	21.85	8	0.7357	0.0054
32	0.8577	0.7863	0.8310	16.97	6	0.7571	2	0.0694	0.0059	21.96	8	0.8264	0.0059
34	0.9567	0.8851	0.9267	17.38	6	0.8453	2	0.0763	0.0065	22.06	8	0.9215	0.0065
36	1.0603	0.9876	1.0267	17.73	6	0.9375	2	0.0834	0.0071	22.14	8	1.0209	0.0071
38	1.1682	1.0939	1.1309	18.04	6	1.0337	2	0.0907	0.0077	22.22	8	1.1244	0.0077
40	1.2804	1.2041	1.2392	18.31	7	1.1998	1	0.0322	0.0083	22.29	8	1.2320	0.0083
42	1.3969	1.3180	1.3514	18.56	7	1.3090	1	0.0346	0.0089	22.35	8	1.3436	0.0089
44	1.5176	1.4357	1.4676	18.77	7	1.4220	1	0.0371	0.0096	22.41	8	1.4591	0.0096
46	1.6423	1.5571	1.5877	18.97	7	1.5388	1	0.0397	0.0102	22.46	8	1.5785	0.0102
48	1.7712	1.6821	1.7115	19.15	7	1.6594	1	0.0423	0.0109	22.51	8	1.7017	0.0109
50	1.9040	1.8109	1.8392	19.31	7	1.7837	1	0.0449	0.0115	22.56	8	1.8286	0.0115
52	2.0407	1.9432	1.9705	19.47	7	1.9117	1	0.0476	0.0122	22.60	8	1.9592	0.0122
54	2.1814	2.0790	2.1055	19.60	7	2.0432	1	0.0503	0.0129	22.64	8	2.0935	0.0129
56	2.3259	2.2185	2.2440	19.73	7	2.1783	1	0.0530	0.0136	22.67	8	2.2314	0.0136
58	2.4742	2.3614	2.3862	19.85	7	2.3170	1	0.0558	0.0143	22.71	8	2.3728	0.0143
60	2.6263	2.5077	2.5319	19.96	7	2.4591	1	0.0586	0.0150	22.74	8	2.5177	0.0150

Jack Pine Sawlog and Pulp Volume Estimates

24 metre

Total Height - 24 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5083	0.2305	0.4926	6.54	2	0.1932	6	0.2973	0.0038	21.42	8	0.4905	0.0038
26	0.5884	0.3691	0.5703	9.48	3	0.3178	5	0.2498	0.0043	21.59	8	0.5676	0.0043
28	0.6734	0.4856	0.6526	11.29	4	0.4585	4	0.1908	0.0048	21.73	8	0.6493	0.0048
30	0.7632	0.5943	0.7396	12.55	4	0.5219	4	0.2138	0.0054	21.85	8	0.7357	0.0054
32	0.8577	0.7012	0.8310	13.50	5	0.6849	3	0.1415	0.0059	21.96	8	0.8264	0.0059
34	0.9567	0.8086	0.9267	14.26	5	0.7657	3	0.1559	0.0065	22.06	8	0.9215	0.0065
36	1.0603	0.9178	1.0267	14.88	5	0.8502	3	0.1707	0.0071	22.14	8	1.0209	0.0071
38	1.1682	1.0296	1.1309	15.41	5	0.9386	3	0.1858	0.0077	22.22	8	1.1244	0.0077
40	1.2804	1.1441	1.2392	15.86	6	1.1339	2	0.0981	0.0083	22.29	8	1.2320	0.0083
42	1.3969	1.2618	1.3514	16.25	6	1.2378	2	0.1058	0.0089	22.35	8	1.3436	0.0089
44	1.5176	1.3826	1.4676	16.60	6	1.3456	2	0.1135	0.0096	22.41	8	1.4591	0.0096
46	1.6423	1.5068	1.5877	16.91	6	1.4571	2	0.1214	0.0102	22.46	8	1.5785	0.0102
48	1.7712	1.6343	1.7115	17.19	6	1.5722	2	0.1295	0.0109	22.51	8	1.7017	0.0109
50	1.9040	1.7651	1.8392	17.44	6	1.6909	2	0.1377	0.0115	22.56	8	1.8286	0.0115
52	2.0407	1.8994	1.9705	17.67	6	1.8132	2	0.1460	0.0122	22.60	8	1.9592	0.0122
54	2.1814	2.0370	2.1055	17.87	6	1.9391	2	0.1544	0.0129	22.64	8	2.0935	0.0129
56	2.3259	2.1779	2.2440	18.07	6	2.0684	2	0.1630	0.0136	22.67	8	2.2314	0.0136
58	2.4742	2.3223	2.3862	18.24	7	2.3170	1	0.0558	0.0143	22.71	8	2.3728	0.0143
60	2.6263	2.4700	2.5319	18.41	7	2.4591	1	0.0586	0.0150	22.74	8	2.5177	0.0150

Total Height - 24 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5083	0.0000	0.4926		0	0.0000	8	0.4905	0.0038	21.42	8	0.4905	0.0038
26	0.5884	0.0508	0.5703	1.29	0	0.0000	8	0.5676	0.0043	21.59	8	0.5676	0.0043
28	0.6734	0.1618	0.6526	3.24	1	0.1420	7	0.5074	0.0048	21.73	8	0.6493	0.0048
30	0.7632	0.3145	0.7396	5.71	2	0.2985	6	0.4372	0.0054	21.85	8	0.7357	0.0054
32	0.8577	0.4784	0.8310	8.04	3	0.4723	5	0.3541	0.0059	21.96	8	0.8264	0.0059
34	0.9567	0.6259	0.9267	9.76	3	0.5300	5	0.3916	0.0065	22.06	8	0.9215	0.0065
36	1.0603	0.7617	1.0267	11.02	4	0.7333	4	0.2876	0.0071	22.14	8	1.0209	0.0071
38	1.1682	0.8920	1.1309	12.00	4	0.8108	4	0.3136	0.0077	22.22	8	1.1244	0.0077
40	1.2804	1.0203	1.2392	12.79	4	0.8916	4	0.3404	0.0083	22.29	8	1.2320	0.0083
42	1.3969	1.1487	1.3514	13.44	5	1.1263	3	0.2173	0.0089	22.35	8	1.3436	0.0089
44	1.5176	1.2782	1.4676	14.00	5	1.2256	3	0.2335	0.0096	22.41	8	1.4591	0.0096
46	1.6423	1.4094	1.5877	14.49	5	1.3284	3	0.2501	0.0102	22.46	8	1.5785	0.0102
48	1.7712	1.5429	1.7115	14.91	5	1.4347	3	0.2670	0.0109	22.51	8	1.7017	0.0109
50	1.9040	1.6788	1.8392	15.29	5	1.5445	3	0.2842	0.0115	22.56	8	1.8286	0.0115
52	2.0407	1.8175	1.9705	15.63	6	1.8132	2	0.1460	0.0122	22.60	8	1.9592	0.0122
54	2.1814	1.9590	2.1055	15.93	6	1.9391	2	0.1544	0.0129	22.64	8	2.0935	0.0129
56	2.3259	2.1034	2.2440	16.21	6	2.0684	2	0.1630	0.0136	22.67	8	2.2314	0.0136
58	2.4742	2.2508	2.3862	16.46	6	2.2011	2	0.1717	0.0143	22.71	8	2.3728	0.0143
60	2.6263	2.4013	2.5319	16.70	6	2.3372	2	0.1805	0.0150	22.74	8	2.5177	0.0150

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.5083	0.4782	0.4926	18.34	7	0.4760	1	0.0145	0.0038	21.42	8	0.4905	0.0038
0.5684	0.5571	0.5703	18.76	7	0.5511	1	0.0165	0.0043	21.59	8	0.5676	0.0043
0.6734	0.6405	0.6526	19.11	7	0.6308	1	0.0185	0.0048	21.73	8	0.6493	0.0048
0.7632	0.7282	0.7396	19.41	7	0.7150	1	0.0207	0.0054	21.85	8	0.7357	0.0054
0.8577	0.8203	0.8310	19.67	7	0.8036	1	0.0229	0.0059	21.96	8	0.8264	0.0059
0.9567	0.9167	0.9267	19.89	7	0.8965	1	0.0251	0.0065	22.06	8	0.9215	0.0065
1.0603	1.0172	1.0267	20.09	7	0.9935	1	0.0274	0.0071	22.14	8	1.0209	0.0071
1.1682	1.1218	1.1309	20.26	7	1.0947	1	0.0298	0.0077	22.22	8	1.1244	0.0077
1.2804	1.2305	1.2392	20.42	7	1.1998	1	0.0322	0.0083	22.29	8	1.2320	0.0083
1.3969	1.3431	1.3514	20.56	7	1.3090	1	0.0346	0.0089	22.35	8	1.3436	0.0089
1.5176	1.4598	1.4676	20.68	8	1.4591	0	0.0000	0.0096	22.41	8	1.4591	0.0096
1.6423	1.5800	1.5877	20.80	8	1.5785	0	0.0000	0.0102	22.46	8	1.5785	0.0102
1.7712	1.7041	1.7115	20.91	8	1.7017	0	0.0000	0.0109	22.51	8	1.7017	0.0109
1.9040	1.8320	1.8392	21.00	8	1.8286	0	0.0000	0.0115	22.56	8	1.8286	0.0115
2.0407	1.9635	1.9705	21.09	8	1.9592	0	0.0000	0.0122	22.60	8	1.9592	0.0122
2.1814	2.0987	2.1055	21.18	8	2.0935	0	0.0000	0.0129	22.64	8	2.0935	0.0129
2.3259	2.2375	2.2440	21.26	8	2.2314	0	0.0000	0.0136	22.67	8	2.2314	0.0136
2.4742	2.3798	2.3862	21.33	8	2.3728	0	0.0000	0.0143	22.71	8	2.3728	0.0143
2.6263	2.5257	2.5319	21.40	8	2.5177	0	0.0000	0.0150	22.74	8	2.5177	0.0150

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.5083	0.4263	0.4926	14.27	5	0.4019	3	0.0886	0.0038	21.42	8	0.4905	0.0038
0.5684	0.5117	0.5703	15.19	5	0.4665	3	0.1011	0.0043	21.59	8	0.5676	0.0043
0.6734	0.5998	0.6526	15.90	6	0.5932	2	0.0561	0.0048	21.73	8	0.6493	0.0048
0.7632	0.6913	0.7396	16.48	6	0.6730	2	0.0626	0.0054	21.85	8	0.7357	0.0054
0.8577	0.7863	0.8310	16.97	6	0.7571	2	0.0694	0.0059	21.96	8	0.8264	0.0059
0.9567	0.8851	0.9267	17.38	6	0.8453	2	0.0763	0.0065	22.06	8	0.9215	0.0065
1.0603	0.9876	1.0267	17.73	6	0.9375	2	0.0834	0.0071	22.14	8	1.0209	0.0071
1.1682	1.0939	1.1309	18.04	6	1.0337	2	0.0907	0.0077	22.22	8	1.1244	0.0077
1.2804	1.2041	1.2392	18.31	7	1.1998	1	0.0322	0.0083	22.29	8	1.2320	0.0083
1.3969	1.3180	1.3514	18.56	7	1.3090	1	0.0346	0.0089	22.35	8	1.3436	0.0089
1.5176	1.4357	1.4676	18.77	7	1.4220	1	0.0371	0.0096	22.41	8	1.4591	0.0096
1.6423	1.5571	1.5877	18.97	7	1.5388	1	0.0397	0.0102	22.46	8	1.5785	0.0102
1.7712	1.6821	1.7115	19.15	7	1.6594	1	0.0423	0.0109	22.51	8	1.7017	0.0109
1.9040	1.8109	1.8392	19.31	7	1.7837	1	0.0449	0.0115	22.56	8	1.8286	0.0115
2.0407	1.9432	1.9705	19.47	7	1.9117	1	0.0476	0.0122	22.60	8	1.9592	0.0122
2.1814	2.0790	2.1055	19.60	7	2.0432	1	0.0503	0.0129	22.64	8	2.0935	0.0129
2.3259	2.2185	2.2440	19.73	7	2.1783	1	0.0530	0.0136	22.67	8	2.2314	0.0136
2.4742	2.3614	2.3862	19.85	7	2.3170	1	0.0558	0.0143	22.71	8	2.3728	0.0143
2.6263	2.5077	2.5319	19.96	7	2.4591	1	0.0586	0.0150	22.74	8	2.5177	0.0150

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.5083	0.2305	0.4926	6.54	2	0.1932	6	0.2973	0.0038	21.42	8	0.4905	0.0038
0.5884	0.3091	0.5703	9.48	3	0.3178	5	0.2498	0.0043	21.59	8	0.5676	0.0043
0.6734	0.4656	0.6526	11.29	4	0.4585	4	0.1908	0.0048	21.73	8	0.6493	0.0048
0.7632	0.5943	0.7396	12.55	4	0.5219	4	0.2138	0.0054	21.85	8	0.7357	0.0054
0.8577	0.7012	0.8310	13.50	5	0.6649	3	0.1415	0.0059	21.96	8	0.8264	0.0059
0.9567	0.8086	0.9267	14.26	5	0.7657	3	0.1559	0.0065	22.06	8	0.9215	0.0065
1.0603	0.9178	1.0267	14.88	5	0.8502	3	0.1707	0.0071	22.14	8	1.0209	0.0071
1.1682	1.0296	1.1309	15.41	5	0.9386	3	0.1858	0.0077	22.22	8	1.1244	0.0077
1.2804	1.1441	1.2392	15.86	6	1.1339	2	0.0981	0.0083	22.29	8	1.2320	0.0083
1.3969	1.2618	1.3514	16.25	6	1.2378	2	0.1058	0.0089	22.35	8	1.3436	0.0089
1.5176	1.3826	1.4676	16.60	6	1.3456	2	0.1135	0.0096	22.41	8	1.4591	0.0096
1.6423	1.5068	1.5877	16.91	6	1.4571	2	0.1214	0.0102	22.46	8	1.5785	0.0102
1.7712	1.6343	1.7115	17.19	6	1.5722	2	0.1295	0.0109	22.51	8	1.7017	0.0109
1.9040	1.7651	1.8392	17.44	6	1.6909	2	0.1377	0.0115	22.56	8	1.8286	0.0115
2.0407	1.8994	1.9705	17.67	6	1.8132	2	0.1460	0.0122	22.60	8	1.9592	0.0122
2.1814	2.0370	2.1055	17.87	6	1.9391	2	0.1544	0.0129	22.64	8	2.0935	0.0129
2.3259	2.1779	2.2440	18.07	6	2.0684	2	0.1630	0.0136	22.67	8	2.2314	0.0136
2.4742	2.3223	2.3862	18.24	7	2.3170	1	0.0558	0.0143	22.71	8	2.3728	0.0143
2.6263	2.4700	2.5319	18.41	7	2.4591	1	0.0586	0.0150	22.74	8	2.5177	0.0150

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.5083	0.0000	0.4926		0	0.0000	8	0.4905	0.0038	21.42	8	0.4905	0.0038
0.5884	0.0508	0.5703	1.29	0	0.0000	8	0.5676	0.0043	21.59	8	0.5676	0.0043
0.6734	0.1618	0.6526	3.24	1	0.1420	7	0.5074	0.0048	21.73	8	0.6493	0.0048
0.7632	0.3145	0.7396	5.71	2	0.2985	6	0.4372	0.0054	21.85	8	0.7357	0.0054
0.8577	0.4784	0.8310	8.04	3	0.4723	5	0.3541	0.0059	21.96	8	0.8264	0.0059
0.9567	0.6259	0.9267	9.76	3	0.5300	5	0.3916	0.0065	22.06	8	0.9215	0.0065
1.0603	0.7617	1.0267	11.02	4	0.7333	4	0.2676	0.0071	22.14	8	1.0209	0.0071
1.1682	0.8920	1.1309	12.00	4	0.8108	4	0.3136	0.0077	22.22	8	1.1244	0.0077
1.2804	1.0203	1.2392	12.79	4	0.8916	4	0.3404	0.0083	22.29	8	1.2320	0.0083
1.3969	1.1487	1.3514	13.44	5	1.1263	3	0.2173	0.0089	22.35	8	1.3436	0.0089
1.5176	1.2782	1.4676	14.00	5	1.2256	3	0.2335	0.0096	22.41	8	1.4591	0.0096
1.6423	1.4094	1.5877	14.49	5	1.3264	3	0.2501	0.0102	22.46	8	1.5785	0.0102
1.7712	1.5429	1.7115	14.91	5	1.4347	3	0.2670	0.0109	22.51	8	1.7017	0.0109
1.9040	1.6788	1.8392	15.29	5	1.5445	3	0.2842	0.0115	22.56	8	1.8286	0.0115
2.0407	1.8175	1.9705	15.63	6	1.8132	2	0.1460	0.0122	22.60	8	1.9592	0.0122
2.1814	1.9590	2.1055	15.93	6	1.9391	2	0.1544	0.0129	22.64	8	2.0935	0.0129
2.3259	2.1034	2.2440	16.21	6	2.0684	2	0.1630	0.0136	22.67	8	2.2314	0.0136
2.4742	2.2506	2.3862	16.46	6	2.2011	2	0.1717	0.0143	22.71	8	2.3728	0.0143
2.6263	2.4013	2.5319	16.70	6	2.3372	2	0.1805	0.0150	22.74	8	2.5177	0.0150

Jack Pine Sawlog and Pulp Volume Estimates

24 metre

Total Height - 24 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

	Sawlog, Pulp & Unmerchantable Volume									Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5083	0.0000	0.4926		0	0.0000	8	0.4905	0.0038	21.42	8	0.4905	0.0038
26	0.5884	0.0000	0.5703		0	0.0000	8	0.5676	0.0043	21.59	8	0.5676	0.0043
28	0.6734	0.0000	0.6526		0	0.0000	8	0.6493	0.0048	21.73	8	0.6493	0.0048
30	0.7632	0.0165	0.7396	0.53	0	0.0000	8	0.7357	0.0054	21.85	8	0.7357	0.0054
32	0.8577	0.1166	0.8310	1.83	0	0.0000	8	0.8264	0.0059	21.96	8	0.8264	0.0059
34	0.9567	0.2456	0.9267	3.35	1	0.2090	7	0.7126	0.0065	22.06	8	0.9215	0.0065
36	1.0603	0.4065	1.0267	5.11	1	0.2341	7	0.7868	0.0071	22.14	8	1.0209	0.0071
38	1.1682	0.5844	1.1309	6.90	2	0.4721	6	0.6523	0.0077	22.22	8	1.1244	0.0077
40	1.2804	0.7577	1.2392	8.43	3	0.7209	5	0.5112	0.0083	22.29	8	1.2320	0.0083
42	1.3969	0.9206	1.3514	9.65	3	0.7903	5	0.5533	0.0089	22.35	8	1.3436	0.0089
44	1.5176	1.0758	1.4676	10.64	4	1.0632	4	0.3959	0.0096	22.41	8	1.4591	0.0096
46	1.6423	1.2268	1.5877	11.44	4	1.1540	4	0.4245	0.0102	22.46	8	1.5785	0.0102
48	1.7712	1.3758	1.7115	12.13	4	1.2479	4	0.4538	0.0109	22.51	8	1.7017	0.0109
50	1.9040	1.5243	1.8392	12.71	4	1.3450	4	0.4836	0.0115	22.56	8	1.8286	0.0115
52	2.0407	1.6734	1.9705	13.22	5	1.6576	3	0.3016	0.0122	22.60	8	1.9592	0.0122
54	2.1814	1.8237	2.1055	13.67	5	1.7741	3	0.3194	0.0129	22.64	8	2.0935	0.0129
56	2.3259	1.9756	2.2440	14.07	5	1.8939	3	0.3375	0.0136	22.67	8	2.2314	0.0136
58	2.4742	2.1296	2.3862	14.44	5	2.0170	3	0.3558	0.0143	22.71	8	2.3728	0.0143
60	2.6263	2.2858	2.5319	14.76	5	2.1434	3	0.3744	0.0150	22.74	8	2.5177	0.0150

Total Height - 24 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

	Sawlog, Pulp & Unmerchantable Volume									Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5083	0.0000	0.4926		0	0.0000	8	0.4905	0.0038	21.42	8	0.4905	0.0038
26	0.5884	0.0000	0.5703		0	0.0000	8	0.5676	0.0043	21.59	8	0.5676	0.0043
28	0.6734	0.0000	0.6526		0	0.0000	8	0.6493	0.0048	21.73	8	0.6493	0.0048
30	0.7632	0.0000	0.7396		0	0.0000	8	0.7357	0.0054	21.85	8	0.7357	0.0054
32	0.8577	0.0000	0.8310		0	0.0000	8	0.8264	0.0059	21.96	8	0.8264	0.0059
34	0.9567	0.0000	0.9267		0	0.0000	8	0.9215	0.0065	22.06	8	0.9215	0.0065
36	1.0603	0.0787	1.0267	1.08	0	0.0000	8	1.0209	0.0071	22.14	8	1.0209	0.0071
38	1.1682	0.1969	1.1309	2.16	0	0.0000	8	1.1244	0.0077	22.22	8	1.1244	0.0077
40	1.2804	0.3394	1.2392	3.36	1	0.2887	7	0.9433	0.0083	22.29	8	1.2320	0.0083
42	1.3969	0.5069	1.3514	4.68	1	0.3182	7	1.0254	0.0089	22.35	8	1.3436	0.0089
44	1.5176	0.6923	1.4676	6.05	2	0.6267	6	0.8324	0.0096	22.41	8	1.4591	0.0096
46	1.6423	0.8825	1.5877	7.33	2	0.6828	6	0.8957	0.0102	22.46	8	1.5785	0.0102
48	1.7712	1.0684	1.7115	8.46	3	1.0160	5	0.6857	0.0109	22.51	8	1.7017	0.0109
50	1.9040	1.2478	1.8392	9.41	3	1.0968	5	0.7318	0.0115	22.56	8	1.8286	0.0115
52	2.0407	1.4219	1.9705	10.21	3	1.1804	5	0.7788	0.0122	22.60	8	1.9592	0.0122
54	2.1814	1.5927	2.1055	10.91	4	1.5487	4	0.5448	0.0129	22.64	8	2.0935	0.0129
56	2.3259	1.7615	2.2440	11.51	4	1.6551	4	0.5762	0.0136	22.67	8	2.2314	0.0136
58	2.4742	1.9296	2.3862	12.04	4	1.7646	4	0.6082	0.0143	22.71	8	2.3728	0.0143
60	2.6263	2.0978	2.5319	12.51	4	1.8771	4	0.6406	0.0150	22.74	8	2.5177	0.0150

Jack Pine Sawlog and Pulp Volume Estimates

26 metre

Total Height - 26 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
28	0.7334	0.6997	0.7128	20.78	8	0.6984	1	0.0134	0.0026	23.58	9	0.7118	0.0026
30	0.8314	0.7958	0.8080	21.10	8	0.7917	1	0.0149	0.0029	23.71	9	0.8066	0.0029
32	0.9345	0.8966	0.9080	21.38	8	0.8898	1	0.0165	0.0032	23.83	9	0.9063	0.0032
34	1.0425	1.0021	1.0128	21.61	8	0.9926	1	0.0181	0.0035	23.93	9	1.0107	0.0035
36	1.1555	1.1122	1.1223	21.83	8	1.1001	1	0.0198	0.0038	24.02	9	1.1199	0.0038
38	1.2732	1.2267	1.2364	22.01	8	1.2121	1	0.0215	0.0041	24.10	9	1.2335	0.0041
40	1.3957	1.3456	1.3549	22.18	8	1.3285	1	0.0232	0.0045	24.18	9	1.3517	0.0045
42	1.5227	1.4689	1.4778	22.33	8	1.4492	1	0.0250	0.0048	24.24	9	1.4742	0.0048
44	1.6543	1.5965	1.6050	22.47	8	1.5742	1	0.0268	0.0051	24.31	9	1.6010	0.0051
46	1.7903	1.7282	1.7364	22.59	8	1.7034	1	0.0286	0.0055	24.36	9	1.7320	0.0055
48	1.9306	1.8640	1.8719	22.70	8	1.8367	1	0.0305	0.0058	24.41	9	1.8672	0.0058
50	2.0753	2.0039	2.0116	22.81	8	1.9741	1	0.0324	0.0062	24.46	9	2.0064	0.0062
52	2.2243	2.1478	2.1552	22.91	8	2.1154	1	0.0343	0.0065	24.51	9	2.1497	0.0065
54	2.3775	2.2957	2.3029	22.99	8	2.2607	1	0.0362	0.0069	24.55	9	2.2969	0.0069
56	2.5348	2.4474	2.4544	23.08	8	2.4099	1	0.0382	0.0073	24.59	9	2.4481	0.0073
58	2.6962	2.6030	2.6098	23.16	8	2.5629	1	0.0402	0.0076	24.62	9	2.6030	0.0076
60	2.8616	2.7624	2.7690	23.23	9	2.7618	0	0.0000	0.0080	24.65	9	2.7618	0.0080

Total Height - 26 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
28	0.7334	0.6563	0.7128	17.35	6	0.6195	3	0.0923	0.0026	23.58	9	0.7118	0.0026
30	0.8314	0.7563	0.8080	17.97	6	0.7034	3	0.1032	0.0029	23.71	9	0.8066	0.0029
32	0.9345	0.8603	0.9080	18.49	7	0.8527	2	0.0536	0.0032	23.83	9	0.9063	0.0032
34	1.0425	0.9684	1.0128	18.93	7	0.9518	2	0.0589	0.0035	23.93	9	1.0107	0.0035
36	1.1555	1.0806	1.1223	19.31	7	1.0555	2	0.0644	0.0038	24.02	9	1.1199	0.0038
38	1.2732	1.1970	1.2364	19.64	7	1.1635	2	0.0700	0.0041	24.10	9	1.2335	0.0041
40	1.3957	1.3175	1.3549	19.94	7	1.2759	2	0.0758	0.0045	24.18	9	1.3517	0.0045
42	1.5227	1.4422	1.4778	20.20	7	1.3926	2	0.0816	0.0048	24.24	9	1.4742	0.0048
44	1.6543	1.5710	1.6050	20.43	7	1.5134	2	0.0876	0.0051	24.31	9	1.6010	0.0051
46	1.7903	1.7038	1.7364	20.64	8	1.7033	1	0.0286	0.0055	24.36	9	1.7320	0.0055
48	1.9306	1.8406	1.8719	20.83	8	1.8367	1	0.0305	0.0058	24.41	9	1.8672	0.0058
50	2.0753	1.9814	2.0116	21.01	8	1.9741	1	0.0324	0.0062	24.46	9	2.0064	0.0062
52	2.2243	2.1261	2.1552	21.17	8	2.1154	1	0.0343	0.0065	24.51	9	2.1497	0.0065
54	2.3775	2.2747	2.3029	21.32	8	2.2607	1	0.0362	0.0069	24.55	9	2.2969	0.0069
56	2.5348	2.4271	2.4544	21.45	8	2.4099	1	0.0382	0.0073	24.59	9	2.4481	0.0073
58	2.6962	2.5833	2.6098	21.58	8	2.5629	1	0.0402	0.0076	24.62	9	2.6030	0.0076
60	2.8616	2.7433	2.7690	21.70	8	2.7196	1	0.0422	0.0080	24.65	9	2.7618	0.0080

Jack Pine Sawlog and Pulp Volume Estimates

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.5083	0.0000	0.4926		0	0.0000	8	0.4905	0.0038	21.42	8	0.4905	0.0038
	0.5884	0.0000	0.5703		0	0.0000	8	0.5676	0.0043	21.59	8	0.5676	0.0043
	0.6734	0.0000	0.6526		0	0.0000	8	0.6493	0.0048	21.73	8	0.6493	0.0048
	0.7632	0.0165	0.7396	0.53	0	0.0000	8	0.7357	0.0054	21.85	8	0.7357	0.0054
	0.8577	0.1166	0.8310	1.83	0	0.0000	8	0.8264	0.0059	21.96	8	0.8264	0.0059
	0.9567	0.2456	0.9267	3.35	1	0.2090	7	0.7126	0.0065	22.06	8	0.9215	0.0065
	1.0603	0.4065	1.0267	5.11	1	0.2341	7	0.7868	0.0071	22.14	8	1.0209	0.0071
	1.1682	0.5844	1.1309	6.90	2	0.4721	6	0.6523	0.0077	22.22	8	1.1244	0.0077
	1.2804	0.7577	1.2392	8.43	3	0.7209	5	0.5112	0.0083	22.29	8	1.2320	0.0083
	1.3969	0.9206	1.3514	9.65	3	0.7903	5	0.5533	0.0089	22.35	8	1.3436	0.0089
	1.5176	1.0758	1.4676	10.64	4	1.0632	4	0.3959	0.0096	22.41	8	1.4591	0.0096
	1.6423	1.2268	1.5877	11.44	4	1.1540	4	0.4245	0.0102	22.46	8	1.5785	0.0102
	1.7712	1.3758	1.7115	12.13	4	1.2479	4	0.4538	0.0109	22.51	8	1.7017	0.0109
	1.9040	1.5243	1.8392	12.71	4	1.3450	4	0.4836	0.0115	22.56	8	1.8286	0.0115
	2.0407	1.6734	1.9705	13.22	5	1.6576	3	0.3016	0.0122	22.60	8	1.9592	0.0122
	2.1814	1.8237	2.1055	13.67	5	1.7741	3	0.3194	0.0129	22.64	8	2.0935	0.0129
	2.3259	1.9756	2.2440	14.07	5	1.8939	3	0.3375	0.0136	22.67	8	2.2314	0.0136
	2.4742	2.1296	2.3862	14.44	5	2.0170	3	0.3558	0.0143	22.71	8	2.3728	0.0143
	2.6263	2.2858	2.5319	14.76	5	2.1434	3	0.3744	0.0150	22.74	8	2.5177	0.0150

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.5083	0.0000	0.4926		0	0.0000	8	0.4905	0.0038	21.42	8	0.4905	0.0038
	0.5884	0.0000	0.5703		0	0.0000	8	0.5676	0.0043	21.59	8	0.5676	0.0043
	0.6734	0.0000	0.6526		0	0.0000	8	0.6493	0.0048	21.73	8	0.6493	0.0048
	0.7632	0.0000	0.7396		0	0.0000	8	0.7357	0.0054	21.85	8	0.7357	0.0054
	0.8577	0.0000	0.8310		0	0.0000	8	0.8264	0.0059	21.96	8	0.8264	0.0059
	0.9567	0.0000	0.9267		0	0.0000	8	0.9215	0.0065	22.06	8	0.9215	0.0065
	1.0603	0.0787	1.0267	1.08	0	0.0000	8	1.0209	0.0071	22.14	8	1.0209	0.0071
	1.1682	0.1969	1.1309	2.16	0	0.0000	8	1.1244	0.0077	22.22	8	1.1244	0.0077
	1.2804	0.3394	1.2392	3.36	1	0.2887	7	0.9433	0.0083	22.29	8	1.2320	0.0083
	1.3969	0.5069	1.3514	4.68	1	0.3182	7	1.0254	0.0089	22.35	8	1.3436	0.0089
	1.5176	0.6923	1.4676	6.05	2	0.6267	6	0.8324	0.0096	22.41	8	1.4591	0.0096
	1.6423	0.8825	1.5877	7.33	2	0.6828	6	0.8957	0.0102	22.46	8	1.5785	0.0102
	1.7712	1.0684	1.7115	8.46	3	1.0160	5	0.6857	0.0109	22.51	8	1.7017	0.0109
	1.9040	1.2478	1.8392	9.41	3	1.0968	5	0.7318	0.0115	22.56	8	1.8286	0.0115
	2.0407	1.4219	1.9705	10.21	3	1.1804	5	0.7788	0.0122	22.60	8	1.9592	0.0122
	2.1814	1.5927	2.1055	10.91	4	1.5487	4	0.5448	0.0129	22.64	8	2.0935	0.0129
	2.3259	1.7615	2.2440	11.51	4	1.6551	4	0.5762	0.0136	22.67	8	2.2314	0.0136
	2.4742	1.9296	2.3862	12.04	4	1.7646	4	0.6082	0.0143	22.71	8	2.3728	0.0143
	2.6263	2.0978	2.5319	12.51	4	1.8771	4	0.6406	0.0150	22.74	8	2.5177	0.0150

Jack Pine Sawlog and Pulp Volume Estimates

										Pulp & Unmerchantable Volume			
DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.7334	0.6997	0.7128	20.78	8	0.6984	1	0.0134	0.0026	23.58	9	0.7118	0.0026
12	0.8314	0.7958	0.8080	21.10	8	0.7917	1	0.0149	0.0029	23.71	9	0.8066	0.0029
14	0.9345	0.8966	0.9080	21.36	8	0.8898	1	0.0165	0.0032	23.83	9	0.9063	0.0032
16	1.0425	1.0021	1.0128	21.61	8	0.9926	1	0.0181	0.0035	23.93	9	1.0107	0.0035
18	1.1555	1.1122	1.1223	21.83	8	1.1001	1	0.0196	0.0038	24.02	9	1.1199	0.0038
20	1.2732	1.2267	1.2364	22.01	8	1.2121	1	0.0215	0.0041	24.10	9	1.2335	0.0041
22	1.3957	1.3456	1.3549	22.18	8	1.3285	1	0.0232	0.0045	24.18	9	1.3517	0.0045
24	1.5227	1.4689	1.4778	22.33	8	1.4492	1	0.0250	0.0048	24.24	9	1.4742	0.0048
26	1.6543	1.5965	1.6050	22.47	8	1.5742	1	0.0268	0.0051	24.31	9	1.6010	0.0051
28	1.7903	1.7282	1.7364	22.59	8	1.7034	1	0.0286	0.0055	24.36	9	1.7320	0.0055
30	1.9306	1.8640	1.8719	22.70	8	1.8367	1	0.0305	0.0058	24.41	9	1.8672	0.0058
32	2.0753	2.0039	2.0116	22.81	8	1.9741	1	0.0324	0.0062	24.46	9	2.0064	0.0062
34	2.2243	2.1478	2.1552	22.91	8	2.1154	1	0.0343	0.0065	24.51	9	2.1497	0.0065
36	2.3775	2.2957	2.3029	22.99	8	2.2607	1	0.0362	0.0069	24.55	9	2.2969	0.0069
38	2.5348	2.4474	2.4544	23.08	8	2.4099	1	0.0362	0.0073	24.59	9	2.4481	0.0073
40	2.6962	2.6030	2.6098	23.16	8	2.5629	1	0.0402	0.0076	24.62	9	2.6030	0.0076
42	2.8616	2.7624	2.7690	23.23	9	2.7618	0	0.0000	0.0080	24.65	9	2.7618	0.0080

Total Height - 35 m — Sawlog Upper Diameter - 15 cm — Stump Height - 0.3 m

										Pulp & Unmerchantable Volume			
DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.7334	0.6563	0.7126	17.35	6	0.6195	3	0.0923	0.0026	23.58	9	0.7118	0.0026
12	0.8314	0.7563	0.8080	17.97	6	0.7034	3	0.1032	0.0029	23.71	9	0.8066	0.0029
14	0.9345	0.8603	0.9080	18.49	7	0.8527	2	0.0536	0.0032	23.83	9	0.9063	0.0032
16	1.0425	0.9684	1.0128	18.93	7	0.9518	2	0.0589	0.0035	23.93	9	1.0107	0.0035
18	1.1555	1.0806	1.1223	19.31	7	1.0555	2	0.0644	0.0038	24.02	9	1.1199	0.0038
20	1.2732	1.1970	1.2364	19.64	7	1.1635	2	0.0700	0.0041	24.10	9	1.2335	0.0041
22	1.3957	1.3175	1.3549	19.94	7	1.2759	2	0.0758	0.0045	24.18	9	1.3517	0.0045
24	1.5227	1.4422	1.4778	20.20	7	1.3926	2	0.0816	0.0048	24.24	9	1.4742	0.0048
26	1.6543	1.5710	1.6050	20.43	7	1.5134	2	0.0876	0.0051	24.31	9	1.6010	0.0051
28	1.7903	1.7038	1.7364	20.64	8	1.7034	1	0.0286	0.0055	24.36	9	1.7320	0.0055
30	1.9306	1.8406	1.8719	20.83	8	1.8367	1	0.0305	0.0058	24.41	9	1.8672	0.0058
32	2.0753	1.9814	2.0116	21.01	8	1.9741	1	0.0324	0.0062	24.46	9	2.0064	0.0062
34	2.2243	2.1261	2.1552	21.17	8	2.1154	1	0.0343	0.0065	24.51	9	2.1497	0.0065
36	2.3775	2.2747	2.3029	21.32	8	2.2607	1	0.0362	0.0069	24.55	9	2.2969	0.0069
38	2.5348	2.4271	2.4544	21.45	8	2.4099	1	0.0362	0.0073	24.59	9	2.4481	0.0073
40	2.6962	2.5833	2.6098	21.58	8	2.5629	1	0.0402	0.0076	24.62	9	2.6030	0.0076
42	2.8616	2.7433	2.7690	21.70	8	2.7196	1	0.0422	0.0080	24.65	9	2.7618	0.0080

Jack Pine Sawlog and Pulp Volume Estimates

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
10	0.7334	0.5342	0.7128	12.42	4	0.4682	5	0.2437	0.0026	23.56	9	0.7118	0.0026
11	0.8314	0.6528	0.8080	13.77	5	0.6276	4	0.1790	0.0029	23.71	9	0.8066	0.0029
12	0.9345	0.7694	0.9080	14.79	5	0.7075	4	0.1988	0.0032	23.83	9	0.9063	0.0032
13	1.0425	0.8808	1.0128	15.80	6	0.8647	3	0.1260	0.0035	23.93	9	1.0107	0.0035
14	1.1555	1.0062	1.1223	16.27	6	0.9819	3	0.1379	0.0038	24.02	9	1.1199	0.0038
15	1.2732	1.1283	1.2364	16.84	6	1.0834	3	0.1501	0.0041	24.10	9	1.2335	0.0041
16	1.3957	1.2536	1.3549	17.32	6	1.1890	3	0.1626	0.0045	24.18	9	1.3517	0.0045
17	1.5227	1.3823	1.4778	17.74	6	1.2988	3	0.1754	0.0048	24.24	9	1.4742	0.0048
18	1.6543	1.5144	1.6050	18.11	7	1.5134	2	0.0876	0.0051	24.31	9	1.6010	0.0051
19	1.7903	1.6502	1.7364	18.44	7	1.6383	2	0.0937	0.0055	24.36	9	1.7320	0.0055
20	1.9306	1.7896	1.8719	18.74	7	1.7673	2	0.0998	0.0058	24.41	9	1.8672	0.0058
21	2.0753	1.9327	2.0116	19.01	7	1.9003	2	0.1061	0.0062	24.46	9	2.0064	0.0062
22	2.2243	2.0795	2.1552	19.25	7	2.0372	2	0.1125	0.0065	24.51	9	2.1497	0.0065
23	2.3775	2.2299	2.3029	19.48	7	2.1779	2	0.1190	0.0069	24.55	9	2.2969	0.0069
24	2.5348	2.3840	2.4544	19.68	7	2.3225	2	0.1255	0.0073	24.59	9	2.4481	0.0073
25	2.6962	2.5417	2.6098	19.87	7	2.4708	2	0.1322	0.0076	24.62	9	2.6030	0.0076
26	2.8616	2.7031	2.7690	20.05	7	2.6229	2	0.1389	0.0080	24.65	9	2.7618	0.0080

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
10	0.7334	0.1727	0.7128	3.45	1	0.1421	8	0.5697	0.0026	23.58	9	0.7118	0.0026
11	0.8314	0.3452	0.8080	6.27	2	0.3009	7	0.5057	0.0029	23.71	9	0.8066	0.0029
12	0.9345	0.5288	0.9080	8.90	3	0.4793	6	0.4270	0.0032	23.83	9	0.9063	0.0032
13	1.0425	0.6906	1.0128	10.79	4	0.6747	5	0.3360	0.0035	23.93	9	1.0107	0.0035
14	1.1555	0.8391	1.1223	12.15	4	0.7509	5	0.3689	0.0038	24.02	9	1.1199	0.0038
15	1.2732	0.9813	1.2364	13.20	5	0.9715	4	0.2620	0.0041	24.10	9	1.2335	0.0041
16	1.3957	1.1215	1.3549	14.04	5	1.0675	4	0.2842	0.0045	24.18	9	1.3517	0.0045
17	1.5227	1.2616	1.4778	14.75	5	1.1673	4	0.3069	0.0048	24.24	9	1.4742	0.0048
18	1.6543	1.4030	1.6050	15.34	5	1.2708	4	0.3301	0.0051	24.31	9	1.6010	0.0051
19	1.7903	1.5464	1.7364	15.86	6	1.5303	3	0.2017	0.0055	24.36	9	1.7320	0.0055
20	1.9306	1.6922	1.8719	16.32	6	1.6519	3	0.2153	0.0058	24.41	9	1.8672	0.0058
21	2.0753	1.8406	2.0116	16.72	6	1.7774	3	0.2290	0.0062	24.46	9	2.0064	0.0062
22	2.2243	1.9923	2.1552	17.08	6	1.9067	3	0.2430	0.0065	24.51	9	2.1497	0.0065
23	2.3775	2.1469	2.3029	17.41	6	2.0397	3	0.2572	0.0069	24.55	9	2.2969	0.0069
24	2.5348	2.3046	2.4544	17.70	6	2.1764	3	0.2717	0.0073	24.59	9	2.4481	0.0073
25	2.6962	2.4656	2.6098	17.97	6	2.3166	3	0.2863	0.0076	24.62	9	2.6030	0.0076
26	2.8616	2.6299	2.7690	18.22	7	2.6229	2	0.1389	0.0080	24.65	9	2.7618	0.0080

Jack Pine Sawlog and Pulp Volume Estimates

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 9 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
						Sawlog, Pulp & Unmerchantable Volume				Pulp & Unmerchantable Volume			
20	0.7334	0.0000	0.7128		0	0.0000	9	0.7118	0.0026	23.58	9	0.7118	0.0026
22	0.8314	0.0110	0.8080	0.45	0	0.0000	9	0.8066	0.0029	23.71	9	0.8066	0.0029
24	0.9345	0.1202	0.9080	1.88	0	0.0000	9	0.9063	0.0032	23.83	9	0.9063	0.0032
26	1.0425	0.2632	1.0128	3.59	1	0.2092	8	0.8015	0.0035	23.93	9	1.0107	0.0035
28	1.1555	0.4446	1.1223	5.60	2	0.4291	7	0.6908	0.0038	24.02	9	1.1199	0.0038
30	1.2732	0.6454	1.2364	7.64	2	0.4766	7	0.7569	0.0041	24.10	9	1.2335	0.0041
32	1.3957	0.8378	1.3549	9.34	3	0.7332	6	0.6185	0.0045	24.18	9	1.3517	0.0045
34	1.5227	1.0166	1.4778	10.68	4	1.0010	5	0.4731	0.0048	24.24	9	1.4742	0.0048
36	1.6543	1.1864	1.6050	11.74	4	1.0914	5	0.5096	0.0051	24.31	9	1.6010	0.0051
38	1.7903	1.3512	1.7364	12.61	4	1.1851	5	0.5469	0.0055	24.36	9	1.7320	0.0055
40	1.9306	1.5138	1.8719	13.34	5	1.4892	4	0.3780	0.0058	24.41	9	1.8672	0.0058
42	2.0753	1.6759	2.0116	13.97	5	1.6039	4	0.4026	0.0062	24.46	9	2.0064	0.0062
44	2.2243	1.8386	2.1552	14.51	5	1.7221	4	0.4276	0.0065	24.51	9	2.1497	0.0065
46	2.3775	2.0026	2.3029	15.00	5	1.8439	4	0.4530	0.0069	24.55	9	2.2969	0.0069
48	2.5348	2.1684	2.4544	15.43	5	1.9692	4	0.4789	0.0073	24.59	9	2.4481	0.0073
50	2.6962	2.3364	2.6098	15.81	6	2.3168	3	0.2863	0.0076	24.62	9	2.6030	0.0076
52	2.8616	2.5068	2.7690	16.16	6	2.4607	3	0.3011	0.0080	24.65	9	2.7618	0.0080

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
						Sawlog, Pulp & Unmerchantable Volume				Pulp & Unmerchantable Volume			
20	0.7334	0.0000	0.7128		0	0.0000	9	0.7118	0.0026	23.58	9	0.7118	0.0026
22	0.8314	0.0000	0.8080		0	0.0000	9	0.8066	0.0029	23.71	9	0.8066	0.0029
24	0.9345	0.0000	0.9080		0	0.0000	9	0.9063	0.0032	23.83	9	0.9063	0.0032
26	1.0425	0.0000	1.0128		0	0.0000	9	1.0107	0.0035	23.93	9	1.0107	0.0035
28	1.1555	0.0759	1.1223	1.06	0	0.0000	9	1.1199	0.0038	24.02	9	1.1199	0.0038
30	1.2732	0.2057	1.2364	2.25	0	0.0000	9	1.2335	0.0041	24.10	9	1.2335	0.0041
32	1.3957	0.3641	1.3549	3.60	1	0.2892	8	1.0625	0.0045	24.18	9	1.3517	0.0045
34	1.5227	0.5527	1.4778	5.11	1	0.3186	8	1.1555	0.0048	24.24	9	1.4742	0.0048
36	1.6543	0.7622	1.6050	6.67	2	0.6333	7	0.9676	0.0051	24.31	9	1.6010	0.0051
38	1.7903	0.9753	1.7364	8.13	3	0.9553	6	0.7767	0.0055	24.36	9	1.7320	0.0055
40	1.9306	1.1811	1.8719	9.37	3	1.0352	6	0.8320	0.0058	24.41	9	1.8672	0.0058
42	2.0753	1.3782	2.0116	10.41	3	1.1180	6	0.8895	0.0062	24.46	9	2.0064	0.0062
44	2.2243	1.5688	2.1552	11.29	4	1.4863	5	0.6634	0.0065	24.51	9	2.1497	0.0065
46	2.3775	1.7552	2.3029	12.04	4	1.5933	5	0.7036	0.0069	24.55	9	2.2969	0.0069
48	2.5348	1.9394	2.4544	12.69	4	1.7035	5	0.7446	0.0073	24.59	9	2.4481	0.0073
50	2.6962	2.1228	2.6098	13.25	5	2.0979	4	0.5051	0.0076	24.62	9	2.6030	0.0076
52	2.8616	2.3062	2.7690	13.76	5	2.2301	4	0.5318	0.0080	24.65	9	2.7618	0.0080

Jack Pine Sawlog and Pulp Volume Estimates

26 metre

Total Height - 26 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper dia.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
28	0.7334	0.5342	0.7128	12.42	4	0.4682	5	0.2437	0.0026	23.58	9	0.7118	0.0026
30	0.8314	0.6528	0.8080	13.77	5	0.6276	4	0.1790	0.0029	23.71	9	0.8066	0.0029
32	0.9345	0.7694	0.9080	14.79	5	0.7075	4	0.1988	0.0032	23.83	9	0.9063	0.0032
34	1.0425	0.8868	1.0128	15.60	6	0.8847	3	0.1260	0.0035	23.93	9	1.0107	0.0035
36	1.1555	1.0062	1.1223	16.27	6	0.9819	3	0.1379	0.0038	24.02	9	1.1199	0.0038
38	1.2732	1.1283	1.2364	16.84	6	1.0834	3	0.1501	0.0041	24.10	9	1.2335	0.0041
40	1.3957	1.2536	1.3549	17.32	6	1.1890	3	0.1626	0.0045	24.18	9	1.3517	0.0045
42	1.5227	1.3823	1.4778	17.74	6	1.2988	3	0.1754	0.0048	24.24	9	1.4742	0.0048
44	1.6543	1.5144	1.6050	18.11	7	1.5134	2	0.0876	0.0051	24.31	9	1.6010	0.0051
46	1.7903	1.6502	1.7364	18.44	7	1.6383	2	0.0937	0.0055	24.36	9	1.7320	0.0055
48	1.9306	1.7896	1.8719	18.74	7	1.7673	2	0.0998	0.0058	24.41	9	1.8672	0.0058
50	2.0753	1.9327	2.0116	19.01	7	1.9003	2	0.1061	0.0062	24.46	9	2.0064	0.0062
52	2.2243	2.0795	2.1552	19.25	7	2.0372	2	0.1125	0.0065	24.51	9	2.1497	0.0065
54	2.3775	2.2299	2.3029	19.48	7	2.1779	2	0.1190	0.0069	24.55	9	2.2969	0.0069
56	2.5348	2.3840	2.4544	19.68	7	2.3225	2	0.1255	0.0073	24.59	9	2.4481	0.0073
58	2.6962	2.5417	2.6098	19.87	7	2.4708	2	0.1322	0.0076	24.62	9	2.6030	0.0076
60	2.8616	2.7031	2.7690	20.05	7	2.6229	2	0.1389	0.0080	24.65	9	2.7618	0.0080

Total Height - 26 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper dia.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
28	0.7334	0.1727	0.7128	3.45	1	0.1421	8	0.5697	0.0026	23.58	9	0.7118	0.0026
30	0.8314	0.3452	0.8080	6.27	2	0.3009	7	0.5057	0.0029	23.71	9	0.8066	0.0029
32	0.9345	0.5288	0.9080	8.90	3	0.4793	6	0.4270	0.0032	23.83	9	0.9063	0.0032
34	1.0425	0.6908	1.0128	10.79	4	0.6747	5	0.3360	0.0035	23.93	9	1.0107	0.0035
36	1.1555	0.8391	1.1223	12.15	4	0.7509	5	0.3689	0.0038	24.02	9	1.1199	0.0038
38	1.2732	0.9813	1.2364	13.20	5	0.9715	4	0.2620	0.0041	24.10	9	1.2335	0.0041
40	1.3957	1.1215	1.3549	14.04	5	1.0675	4	0.2842	0.0045	24.18	9	1.3517	0.0045
42	1.5227	1.2616	1.4778	14.75	5	1.1673	4	0.3069	0.0048	24.24	9	1.4742	0.0048
44	1.6543	1.4030	1.6050	15.34	5	1.2709	4	0.3301	0.0051	24.31	9	1.6010	0.0051
46	1.7903	1.5464	1.7364	15.86	6	1.5303	3	0.2017	0.0055	24.36	9	1.7320	0.0055
48	1.9306	1.6922	1.8719	16.32	6	1.6519	3	0.2153	0.0058	24.41	9	1.8672	0.0058
50	2.0753	1.8408	2.0116	16.72	6	1.7774	3	0.2290	0.0062	24.46	9	2.0064	0.0062
52	2.2243	1.9923	2.1552	17.08	6	1.9067	3	0.2430	0.0065	24.51	9	2.1497	0.0065
54	2.3775	2.1469	2.3029	17.41	6	2.0397	3	0.2572	0.0069	24.55	9	2.2969	0.0069
56	2.5348	2.3046	2.4544	17.70	6	2.1764	3	0.2717	0.0073	24.59	9	2.4481	0.0073
58	2.6962	2.4656	2.6098	17.97	6	2.3168	3	0.2863	0.0076	24.62	9	2.6030	0.0076
60	2.8616	2.6299	2.7690	18.22	7	2.6229	2	0.1389	0.0080	24.65	9	2.7618	0.0080

Jack Pine Sawlog and Pulp Volume Estimates

26 metre

Total Height - 26 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
28	0.7334	0.0000	0.7128		0	0.0000	9	0.7118	0.0026	23.58	9	0.7118	0.0026
30	0.8314	0.0110	0.8080	0.45	0	0.0000	9	0.8066	0.0029	23.71	9	0.8066	0.0029
32	0.9345	0.1202	0.9080	1.88	0	0.0000	9	0.9063	0.0032	23.83	9	0.9063	0.0032
34	1.0425	0.2632	1.0128	3.59	1	0.2092	8	0.8015	0.0035	23.93	9	1.0107	0.0035
36	1.1555	0.4446	1.1223	5.60	2	0.4291	7	0.6908	0.0038	24.02	9	1.1199	0.0038
38	1.2732	0.6454	1.2364	7.64	2	0.4766	7	0.7569	0.0041	24.10	9	1.2335	0.0041
40	1.3957	0.8378	1.3549	9.34	3	0.7332	6	0.6185	0.0045	24.18	9	1.3517	0.0045
42	1.5227	1.0166	1.4778	10.68	4	1.0010	5	0.4731	0.0048	24.24	9	1.4742	0.0048
44	1.6543	1.1864	1.6050	11.74	4	1.0914	5	0.5096	0.0051	24.31	9	1.6010	0.0051
46	1.7903	1.3512	1.7364	12.61	4	1.1851	5	0.5469	0.0055	24.36	9	1.7320	0.0055
48	1.9306	1.5138	1.8719	13.34	5	1.4892	4	0.3780	0.0058	24.41	9	1.8672	0.0058
50	2.0753	1.6759	2.0116	13.97	5	1.6039	4	0.4026	0.0062	24.46	9	2.0064	0.0062
52	2.2243	1.8386	2.1552	14.51	5	1.7221	4	0.4276	0.0065	24.51	9	2.1497	0.0065
54	2.3775	2.0026	2.3029	15.00	5	1.8439	4	0.4530	0.0069	24.55	9	2.2969	0.0069
56	2.5348	2.1684	2.4544	15.43	5	1.9692	4	0.4789	0.0073	24.59	9	2.4481	0.0073
58	2.6962	2.3364	2.6098	15.81	6	2.3168	3	0.2863	0.0076	24.62	9	2.6030	0.0076
60	2.8616	2.5068	2.7690	16.16	6	2.4607	3	0.3011	0.0080	24.65	9	2.7618	0.0080

Total Height - 26 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
28	0.7334	0.0000	0.7128		0	0.0000	9	0.7118	0.0026	23.58	9	0.7118	0.0026
30	0.8314	0.0000	0.8080		0	0.0000	9	0.8066	0.0029	23.71	9	0.8066	0.0029
32	0.9345	0.0000	0.9080		0	0.0000	9	0.9063	0.0032	23.83	9	0.9063	0.0032
34	1.0425	0.0000	1.0128		0	0.0000	9	1.0107	0.0035	23.93	9	1.0107	0.0035
36	1.1555	0.0759	1.1223	1.06	0	0.0000	9	1.1199	0.0038	24.02	9	1.1199	0.0038
38	1.2732	0.2057	1.2364	2.25	0	0.0000	9	1.2335	0.0041	24.10	9	1.2335	0.0041
40	1.3957	0.3641	1.3549	3.60	1	0.2892	8	1.0625	0.0045	24.18	9	1.3517	0.0045
42	1.5227	0.5527	1.4778	5.11	1	0.3186	8	1.1555	0.0048	24.24	9	1.4742	0.0048
44	1.6543	0.7622	1.6050	6.67	2	0.6333	7	0.9676	0.0051	24.31	9	1.6010	0.0051
46	1.7903	0.9753	1.7364	8.13	3	0.9553	6	0.7767	0.0055	24.36	9	1.7320	0.0055
48	1.9306	1.1811	1.8719	9.37	3	1.0352	6	0.8320	0.0058	24.41	9	1.8672	0.0058
50	2.0753	1.3782	2.0116	10.41	3	1.1180	6	0.8885	0.0062	24.46	9	2.0064	0.0062
52	2.2243	1.5688	2.1552	11.29	4	1.4863	5	0.6634	0.0065	24.51	9	2.1497	0.0065
54	2.3775	1.7552	2.3029	12.04	4	1.5933	5	0.7036	0.0069	24.55	9	2.2969	0.0069
56	2.5348	1.9394	2.4544	12.69	4	1.7035	5	0.7446	0.0073	24.59	9	2.4481	0.0073
58	2.6962	2.1228	2.6098	13.25	5	2.0979	4	0.5051	0.0076	24.62	9	2.6030	0.0076
60	2.8616	2.3062	2.7690	13.76	5	2.2301	4	0.5318	0.0080	24.65	9	2.7618	0.0080

Jack Pine Sawlog and Pulp Volume Estimates

28 metre

Total Height - 28 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.2522	1.2085	1.2193	23.57	9	1.2050	1	0.0139	0.0018	25.90	10	1.2189	0.0018
38	1.3799	1.3331	1.3434	23.77	9	1.3277	1	0.0151	0.0020	25.99	10	1.3428	0.0020
40	1.5128	1.4626	1.4724	23.95	9	1.4553	1	0.0163	0.0022	26.07	10	1.4716	0.0022
42	1.6507	1.5968	1.6062	24.11	9	1.5877	1	0.0175	0.0023	26.14	10	1.6052	0.0023
44	1.7934	1.7357	1.7447	24.25	9	1.7246	1	0.0188	0.0025	26.20	10	1.7434	0.0025
46	1.9410	1.8791	1.8877	24.38	9	1.8662	1	0.0201	0.0026	26.26	10	1.8863	0.0026
48	2.0933	2.0269	2.0353	24.51	9	2.0122	1	0.0214	0.0028	26.32	10	2.0336	0.0028
50	2.2503	2.1792	2.1873	24.62	9	2.1627	1	0.0227	0.0030	26.37	10	2.1854	0.0030
52	2.4118	2.3358	2.3437	24.72	9	2.3175	1	0.0240	0.0032	26.42	10	2.3415	0.0032
54	2.5779	2.4967	2.5043	24.82	9	2.4766	1	0.0254	0.0033	26.46	10	2.5020	0.0033
56	2.7484	2.6618	2.6692	24.90	9	2.6399	1	0.0268	0.0035	26.50	10	2.6667	0.0035
58	2.9234	2.8311	2.8382	24.99	9	2.8073	1	0.0282	0.0037	26.54	10	2.8355	0.0037
60	3.1026	3.0044	3.0114	25.06	9	2.9789	1	0.0296	0.0039	26.57	10	3.0085	0.0039

Total Height - 28 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.2522	1.1750	1.2193	20.90	8	1.1698	2	0.0490	0.0018	25.90	10	1.2189	0.0018
38	1.3799	1.3016	1.3434	21.26	8	1.2895	2	0.0533	0.0020	25.99	10	1.3428	0.0020
40	1.5128	1.4328	1.4724	21.57	8	1.4139	2	0.0577	0.0022	26.07	10	1.4716	0.0022
42	1.6507	1.5685	1.6062	21.85	8	1.5430	2	0.0621	0.0023	26.14	10	1.6052	0.0023
44	1.7934	1.7086	1.7447	22.09	8	1.6768	2	0.0667	0.0025	26.20	10	1.7434	0.0025
46	1.9410	1.8532	1.8877	22.32	8	1.8150	2	0.0713	0.0026	26.26	10	1.8863	0.0026
48	2.0933	2.0021	2.0353	22.52	8	1.9576	2	0.0760	0.0028	26.32	10	2.0336	0.0028
50	2.2503	2.1553	2.1873	22.71	8	2.1047	2	0.0807	0.0030	26.37	10	2.1854	0.0030
52	2.4118	2.3128	2.3437	22.88	8	2.2560	2	0.0856	0.0032	26.42	10	2.3415	0.0032
54	2.5779	2.4745	2.5043	23.04	8	2.4115	2	0.0905	0.0033	26.46	10	2.5020	0.0033
56	2.7484	2.6403	2.6692	23.18	9	2.6399	1	0.0268	0.0035	26.50	10	2.6667	0.0035
58	2.9234	2.8102	2.8382	23.32	9	2.8073	1	0.0282	0.0037	26.54	10	2.8355	0.0037
60	3.1026	2.9842	3.0114	23.45	9	2.9789	1	0.0296	0.0039	26.57	10	3.0085	0.0039

Total Height - 28 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.2522	1.0960	1.2193	17.68	6	1.0192	4	0.1997	0.0018	25.90	10	1.2189	0.0018
38	1.3799	1.2288	1.3434	18.28	7	1.2225	3	0.1203	0.0020	25.99	10	1.3428	0.0020
40	1.5128	1.3650	1.4724	18.79	7	1.3413	3	0.1303	0.0022	26.07	10	1.4716	0.0022
42	1.6507	1.5049	1.6062	19.24	7	1.4647	3	0.1405	0.0023	26.14	10	1.6052	0.0023
44	1.7934	1.6487	1.7447	19.64	7	1.5925	3	0.1509	0.0025	26.20	10	1.7434	0.0025
46	1.9410	1.7964	1.8877	19.99	7	1.7248	3	0.1615	0.0026	26.26	10	1.8863	0.0026
48	2.0933	1.9481	2.0353	20.30	7	1.8613	3	0.1723	0.0028	26.32	10	2.0336	0.0028
50	2.2503	2.1037	2.1873	20.59	7	2.0022	3	0.1832	0.0030	26.37	10	2.1854	0.0030
52	2.4118	2.2634	2.3437	20.85	8	2.2560	2	0.0856	0.0032	26.42	10	2.3415	0.0032
54	2.5779	2.4270	2.5043	21.09	8	2.4115	2	0.0905	0.0033	26.46	10	2.5020	0.0033
56	2.7484	2.5946	2.6692	21.30	8	2.5712	2	0.0955	0.0035	26.50	10	2.6667	0.0035
58	2.9234	2.7661	2.8382	21.51	8	2.7350	2	0.1005	0.0037	26.54	10	2.8355	0.0037
60	3.1026	2.9416	3.0114	21.69	8	2.9029	2	0.1056	0.0039	26.57	10	3.0085	0.0039

Jack Pine Sawlog and Pulp Volume Estimates

28 metre

Total Height - 28 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.2522	0.9184	1.2193	13.29	5	0.9039	5	0.3150	0.0018	25.90	10	1.2189	0.0018
38	1.3799	1.0727	1.3434	14.41	5	0.9991	5	0.3437	0.0020	25.99	10	1.3428	0.0020
40	1.5128	1.2248	1.4724	15.32	5	1.0985	5	0.3731	0.0022	26.07	10	1.4716	0.0022
42	1.6507	1.3770	1.6062	16.06	6	1.3505	4	0.2547	0.0023	26.14	10	1.6052	0.0023
44	1.7934	1.5306	1.7447	16.70	6	1.4696	4	0.2738	0.0025	26.20	10	1.7434	0.0025
46	1.9410	1.6864	1.8877	17.25	6	1.5929	4	0.2934	0.0026	26.26	10	1.8863	0.0026
48	2.0933	1.8448	2.0353	17.74	6	1.7203	4	0.3133	0.0028	26.32	10	2.0336	0.0028
50	2.2503	2.0063	2.1873	18.16	7	2.0022	3	0.1832	0.0030	26.37	10	2.1854	0.0030
52	2.4118	2.1710	2.3437	18.55	7	2.1472	3	0.1944	0.0032	26.42	10	2.3415	0.0032
54	2.5779	2.3390	2.5043	18.89	7	2.2963	3	0.2057	0.0033	26.46	10	2.5020	0.0033
56	2.7484	2.5105	2.6692	19.21	7	2.4495	3	0.2172	0.0035	26.50	10	2.6667	0.0035
58	2.9234	2.6856	2.8382	19.50	7	2.6067	3	0.2288	0.0037	26.54	10	2.8355	0.0037
60	3.1026	2.8641	3.0114	19.76	7	2.7679	3	0.2406	0.0039	26.57	10	3.0085	0.0039

Total Height - 28 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.2522	0.4847	1.2193	6.11	2	0.4325	8	0.7864	0.0018	25.90	10	1.2189	0.0018
38	1.3799	0.7094	1.3434	8.41	3	0.6744	7	0.6684	0.0020	25.99	10	1.3428	0.0020
40	1.5128	0.9211	1.4724	10.29	3	0.7437	7	0.7279	0.0022	26.07	10	1.4716	0.0022
42	1.6507	1.1159	1.6062	11.73	4	1.0225	6	0.5827	0.0023	26.14	10	1.6052	0.0023
44	1.7934	1.3003	1.7447	12.87	4	1.1153	6	0.6281	0.0025	26.20	10	1.7434	0.0025
46	1.9410	1.4791	1.8877	13.80	5	1.4206	5	0.4657	0.0026	26.26	10	1.8863	0.0026
48	2.0933	1.6556	2.0353	14.58	5	1.5358	5	0.4978	0.0028	26.32	10	2.0336	0.0028
50	2.2503	1.8315	2.1873	15.25	5	1.6548	5	0.5306	0.0030	26.37	10	2.1854	0.0030
52	2.4118	2.0081	2.3437	15.83	6	1.9874	4	0.3542	0.0032	26.42	10	2.3415	0.0032
54	2.5779	2.1861	2.5043	16.34	6	2.1269	4	0.3751	0.0033	26.46	10	2.5020	0.0033
56	2.7484	2.3662	2.6692	16.80	6	2.2703	4	0.3964	0.0035	26.50	10	2.6667	0.0035
58	2.9234	2.5486	2.8382	17.21	6	2.4175	4	0.4180	0.0037	26.54	10	2.8355	0.0037
60	3.1026	2.7337	3.0114	17.58	6	2.5686	4	0.4398	0.0039	26.57	10	3.0085	0.0039

Total Height - 28 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.2522	0.0733	1.2193	1.04	0	0.0000	10	1.2189	0.0018	25.90	10	1.2189	0.0018
38	1.3799	0.2149	1.3434	2.35	0	0.0000	10	1.3428	0.0020	25.99	10	1.3428	0.0020
40	1.5128	0.3899	1.4724	3.85	1	0.2895	9	1.1821	0.0022	26.07	10	1.4716	0.0022
42	1.6507	0.6009	1.6062	5.56	2	0.5838	8	1.0213	0.0023	26.14	10	1.6052	0.0023
44	1.7934	0.8360	1.7447	7.33	2	0.6391	8	1.1043	0.0025	26.20	10	1.7434	0.0025
46	1.9410	1.0727	1.8877	8.96	3	0.9702	7	0.9160	0.0026	26.26	10	1.8863	0.0026
48	2.0933	1.2987	2.0353	10.32	3	1.0518	7	0.9818	0.0028	26.32	10	2.0336	0.0028
50	2.2503	1.5136	2.1873	11.45	4	1.4150	6	0.7704	0.0030	26.37	10	2.1854	0.0030
52	2.4118	1.7208	2.3437	12.40	4	1.5218	6	0.8198	0.0032	26.42	10	2.3415	0.0032
54	2.5779	1.9232	2.5043	13.20	5	1.9041	5	0.5979	0.0033	26.46	10	2.5020	0.0033
56	2.7484	2.1231	2.6692	13.89	5	2.0343	5	0.6324	0.0035	26.50	10	2.6667	0.0035
58	2.9234	2.3220	2.8382	14.49	5	2.1682	5	0.6674	0.0037	26.54	10	2.8355	0.0037
60	3.1026	2.5209	3.0114	15.03	5	2.3056	5	0.7029	0.0039	26.57	10	3.0085	0.0039

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
1.2522	1.2085	1.2193	23.57	9	1.2050	1	0.0139	0.0018	25.90	10	1.2189	0.0018
1.3799	1.3331	1.3434	23.77	9	1.3277	1	0.0151	0.0020	25.99	10	1.3428	0.0020
1.5128	1.4626	1.4724	23.95	9	1.4553	1	0.0163	0.0022	26.07	10	1.4716	0.0022
1.6507	1.5968	1.6062	24.11	9	1.5877	1	0.0175	0.0023	26.14	10	1.6052	0.0023
1.7934	1.7357	1.7447	24.25	9	1.7246	1	0.0188	0.0025	26.20	10	1.7434	0.0025
1.9410	1.8791	1.8877	24.38	9	1.8662	1	0.0201	0.0026	26.26	10	1.8863	0.0026
2.0933	2.0269	2.0353	24.51	9	2.0122	1	0.0214	0.0028	26.32	10	2.0336	0.0028
2.2503	2.1792	2.1873	24.62	9	2.1627	1	0.0227	0.0030	26.37	10	2.1854	0.0030
2.4118	2.3356	2.3437	24.72	9	2.3175	1	0.0240	0.0032	26.42	10	2.3415	0.0032
2.5779	2.4967	2.5043	24.82	9	2.4766	1	0.0254	0.0033	26.46	10	2.5020	0.0033
2.7484	2.6618	2.6692	24.90	9	2.6399	1	0.0268	0.0035	26.50	10	2.6667	0.0035
2.9234	2.8311	2.8382	24.99	9	2.8073	1	0.0282	0.0037	26.54	10	2.8355	0.0037
3.1026	3.0044	3.0114	25.06	9	2.9789	1	0.0296	0.0039	26.57	10	3.0065	0.0039

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
1.2522	1.1750	1.2193	20.90	8	1.1698	2	0.0490	0.0018	25.90	10	1.2189	0.0018
1.3799	1.3016	1.3434	21.26	8	1.2895	2	0.0533	0.0020	25.99	10	1.3428	0.0020
1.5128	1.4328	1.4724	21.57	8	1.4139	2	0.0577	0.0022	26.07	10	1.4716	0.0022
1.6507	1.5685	1.6062	21.85	8	1.5430	2	0.0621	0.0023	26.14	10	1.6052	0.0023
1.7934	1.7086	1.7447	22.09	8	1.6768	2	0.0667	0.0025	26.20	10	1.7434	0.0025
1.9410	1.8532	1.8877	22.32	8	1.8150	2	0.0713	0.0026	26.26	10	1.8863	0.0026
2.0933	2.0021	2.0353	22.52	8	1.9576	2	0.0760	0.0028	26.32	10	2.0336	0.0028
2.2503	2.1553	2.1873	22.71	8	2.1047	2	0.0807	0.0030	26.37	10	2.1854	0.0030
2.4118	2.3128	2.3437	22.88	8	2.2560	2	0.0856	0.0032	26.42	10	2.3415	0.0032
2.5779	2.4745	2.5043	23.04	8	2.4115	2	0.0905	0.0033	26.46	10	2.5020	0.0033
2.7484	2.6403	2.6692	23.18	9	2.6399	1	0.0268	0.0035	26.50	10	2.6667	0.0035
2.9234	2.8102	2.8382	23.32	9	2.8073	1	0.0282	0.0037	26.54	10	2.8355	0.0037
3.1026	2.9842	3.0114	23.45	9	2.9789	1	0.0296	0.0039	26.57	10	3.0065	0.0039

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
1.2522	1.0960	1.2193	17.68	6	1.0192	4	0.1997	0.0018	25.90	10	1.2189	0.0018
1.3799	1.2288	1.3434	18.29	7	1.2225	3	0.1203	0.0020	25.99	10	1.3428	0.0020
1.5128	1.3650	1.4724	18.79	7	1.3413	3	0.1303	0.0022	26.07	10	1.4716	0.0022
1.6507	1.5049	1.6062	19.24	7	1.4647	3	0.1405	0.0023	26.14	10	1.6052	0.0023
1.7934	1.6487	1.7447	19.64	7	1.5925	3	0.1509	0.0025	26.20	10	1.7434	0.0025
1.9410	1.7964	1.8877	19.99	7	1.7248	3	0.1615	0.0026	26.26	10	1.8863	0.0026
2.0933	1.9481	2.0353	20.30	7	1.8613	3	0.1723	0.0028	26.32	10	2.0336	0.0028
2.2503	2.1037	2.1873	20.59	7	2.0022	3	0.1832	0.0030	26.37	10	2.1854	0.0030
2.4118	2.2634	2.3437	20.85	8	2.2560	2	0.0856	0.0032	26.42	10	2.3415	0.0032
2.5779	2.4270	2.5043	21.09	8	2.4115	2	0.0905	0.0033	26.46	10	2.5020	0.0033
2.7484	2.5946	2.6692	21.30	8	2.5712	2	0.0955	0.0035	26.50	10	2.6667	0.0035
2.9234	2.7661	2.8382	21.51	8	2.7360	2	0.1005	0.0037	26.54	10	2.8355	0.0037
3.1026	2.9416	3.0114	21.69	8	2.9029	2	0.1056	0.0039	26.57	10	3.0065	0.0039

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
1.2522	0.9184	1.2193	13.29	5	0.9039	5	0.3150	0.0018	25.90	10	1.2189	0.0018
1.3799	1.0727	1.3434	14.41	5	0.9991	5	0.3437	0.0020	25.99	10	1.3428	0.0020
1.5128	1.2248	1.4724	15.32	5	1.0985	5	0.3731	0.0022	26.07	10	1.4716	0.0022
1.6507	1.3770	1.6062	16.06	6	1.3505	4	0.2547	0.0023	26.14	10	1.6052	0.0023
1.7934	1.5306	1.7447	16.70	6	1.4696	4	0.2738	0.0025	26.20	10	1.7434	0.0025
1.9410	1.6864	1.8877	17.25	6	1.5929	4	0.2934	0.0026	26.26	10	1.8863	0.0026
2.0933	1.8448	2.0353	17.74	6	1.7203	4	0.3133	0.0028	26.32	10	2.0336	0.0028
2.2503	2.0063	2.1873	18.16	7	2.0022	3	0.1832	0.0030	26.37	10	2.1854	0.0030
2.4118	2.1710	2.3437	18.55	7	2.1472	3	0.1944	0.0032	26.42	10	2.3415	0.0032
2.5779	2.3390	2.5043	18.89	7	2.2963	3	0.2057	0.0033	26.46	10	2.5020	0.0033
2.7484	2.5105	2.6692	19.21	7	2.4495	3	0.2172	0.0035	26.50	10	2.6667	0.0035
2.9234	2.6856	2.8382	19.50	7	2.6067	3	0.2288	0.0037	26.54	10	2.8355	0.0037
3.1026	2.8641	3.0114	19.76	7	2.7679	3	0.2406	0.0039	26.57	10	3.0085	0.0039

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
1.2522	0.4847	1.2193	6.11	2	0.4325	8	0.7864	0.0018	25.90	10	1.2189	0.0018
1.3799	0.7094	1.3434	8.41	3	0.6744	7	0.6684	0.0020	25.99	10	1.3428	0.0020
1.5128	0.9211	1.4724	10.29	3	0.7437	7	0.7279	0.0022	26.07	10	1.4716	0.0022
1.6507	1.1159	1.6062	11.73	4	1.0225	6	0.5827	0.0023	26.14	10	1.6052	0.0023
1.7934	1.3003	1.7447	12.87	4	1.1153	6	0.6281	0.0025	26.20	10	1.7434	0.0025
1.9410	1.4791	1.8877	13.80	5	1.4206	5	0.4657	0.0026	26.26	10	1.8863	0.0026
2.0933	1.6556	2.0353	14.58	5	1.5358	5	0.4978	0.0028	26.32	10	2.0336	0.0028
2.2503	1.8315	2.1873	15.25	5	1.6548	5	0.5306	0.0030	26.37	10	2.1854	0.0030
2.4118	2.0081	2.3437	15.83	6	1.9874	4	0.3542	0.0032	26.42	10	2.3415	0.0032
2.5779	2.1861	2.5043	16.34	6	2.1269	4	0.3751	0.0033	26.46	10	2.5020	0.0033
2.7484	2.3662	2.6692	16.80	6	2.2703	4	0.3964	0.0035	26.50	10	2.6667	0.0035
2.9234	2.5486	2.8382	17.21	6	2.4175	4	0.4180	0.0037	26.54	10	2.8355	0.0037
3.1026	2.7337	3.0114	17.58	6	2.5686	4	0.4398	0.0039	26.57	10	3.0085	0.0039

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
1.2522	0.0733	1.2193	1.04	0	0.0000	10	1.2189	0.0018	25.90	10	1.2189	0.0018
1.3799	0.2149	1.3434	2.35	0	0.0000	10	1.3428	0.0020	25.99	10	1.3428	0.0020
1.5128	0.3699	1.4724	3.85	1	0.2895	9	1.1821	0.0022	26.07	10	1.4716	0.0022
1.6507	0.6009	1.6062	5.56	2	0.5838	8	1.0213	0.0023	26.14	10	1.6052	0.0023
1.7934	0.8360	1.7447	7.33	2	0.6391	8	1.1043	0.0025	26.20	10	1.7434	0.0025
1.9410	1.0727	1.8877	8.86	3	0.9702	7	0.9160	0.0026	26.26	10	1.8863	0.0026
2.0933	1.2987	2.0353	10.32	3	1.0516	7	0.9818	0.0029	26.32	10	2.0336	0.0028
2.2503	1.5136	2.1873	11.45	4	1.4150	6	0.7704	0.0030	26.37	10	2.1854	0.0030
2.4118	1.7208	2.3437	12.40	4	1.5218	6	0.8196	0.0032	26.42	10	2.3415	0.0032
2.5779	1.9232	2.5043	13.20	5	1.9041	5	0.5979	0.0033	26.46	10	2.5020	0.0033
2.7484	2.1231	2.6692	13.89	5	2.0343	5	0.6324	0.0035	26.50	10	2.6667	0.0035
2.9234	2.3220	2.8382	14.49	5	2.1682	5	0.6674	0.0037	26.54	10	2.8355	0.0037
3.1026	2.5209	3.0114	15.03	5	2.3056	5	0.7029	0.0039	26.57	10	3.0085	0.0039

Jack Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
2.2587	2.1924	2.2013	26.31	10	2.1869	0	0.0000	0.0156	28.22	10	2.1869	0.0156
2.4262	2.3574	2.3659	26.43	10	2.3505	1	0.0153	0.0012	28.28	11	2.3659	0.0012
2.6027	2.5270	2.5353	26.54	10	2.5189	1	0.0163	0.0013	28.33	11	2.5351	0.0013
2.7821	2.7013	2.7093	26.64	10	2.6919	1	0.0172	0.0014	28.37	11	2.7090	0.0014
2.9662	2.8801	2.8879	26.73	10	2.8694	1	0.0181	0.0014	28.42	11	2.8875	0.0014
3.1551	3.0634	3.0710	26.82	10	3.0515	1	0.0190	0.0015	28.46	11	3.0705	0.0015
3.3486	3.2512	3.2585	26.90	10	3.2360	1	0.0200	0.0016	28.50	11	3.2579	0.0016

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
2.2587	2.1663	2.2013	24.22	9	2.1444	1	0.0424	0.0156	28.22	10	2.1869	0.0156
2.4262	2.3322	2.3659	24.42	9	2.3054	2	0.0605	0.0012	28.28	11	2.3659	0.0012
2.6027	2.5028	2.5353	24.60	9	2.4711	2	0.0641	0.0013	28.33	11	2.5351	0.0013
2.7821	2.6779	2.7093	24.76	9	2.6413	2	0.0677	0.0014	28.37	11	2.7090	0.0014
2.9662	2.8575	2.8879	24.92	9	2.8161	2	0.0715	0.0014	28.42	11	2.8875	0.0014
3.1551	3.0415	3.0710	25.06	9	2.9953	2	0.0752	0.0015	28.46	11	3.0705	0.0015
3.3486	3.2299	3.2585	25.20	9	3.1789	2	0.0791	0.0016	28.50	11	3.2579	0.0016

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
2.2587	2.1092	2.2013	21.88	8	2.0647	2	0.1222	0.0156	28.22	10	2.1869	0.0156
2.4262	2.2777	2.3659	22.18	8	2.2205	3	0.1454	0.0012	28.28	11	2.3659	0.0012
2.6027	2.4506	2.5353	22.46	8	2.3809	3	0.1542	0.0013	28.33	11	2.5351	0.0013
2.7821	2.6278	2.7093	22.71	8	2.5459	3	0.1631	0.0014	28.37	11	2.7090	0.0014
2.9662	2.8092	2.8879	22.94	8	2.7153	3	0.1722	0.0014	28.42	11	2.8875	0.0014
3.1551	2.9950	3.0710	23.15	8	2.8891	3	0.1814	0.0015	28.46	11	3.0705	0.0015
3.3486	3.1849	3.2585	23.55	9	3.1789	2	0.0791	0.0016	28.50	11	3.2579	0.0016

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
2.2587	2.0003	2.2013	19.17	7	1.9430	3	0.2436	0.0156	28.22	10	2.1869	0.0156
2.4262	2.1750	2.3659	19.62	7	2.0909	4	0.2749	0.0012	28.28	11	2.3659	0.0012
2.6027	2.3532	2.5353	20.03	7	2.2433	4	0.2919	0.0013	28.33	11	2.5351	0.0013
2.7821	2.5350	2.7093	20.39	7	2.4000	4	0.3091	0.0014	28.37	11	2.7090	0.0014
2.9662	2.7206	2.8879	20.73	8	2.7153	3	0.1722	0.0014	28.42	11	2.8875	0.0014
3.1551	2.9100	3.0710	21.03	8	2.8891	3	0.1814	0.0015	28.46	11	3.0705	0.0015
3.3486	3.1033	3.2585	21.31	8	3.0672	3	0.1907	0.0016	28.50	11	3.2579	0.0016

Jack Pine Sawlog and Pulp Volume Estimates

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	2.2587	1.8005	2.2013	15.84	6	1.7792	4	0.4076	0.0156	28.22	10	2.1869	0.0156
	2.4282	1.9905	2.3659	16.54	6	1.9162	5	0.4497	0.0012	28.26	11	2.3659	0.0012
	2.6027	2.1813	2.5353	17.16	6	2.0573	5	0.4778	0.0013	28.33	11	2.5351	0.0013
	2.7821	2.3737	2.7093	17.70	6	2.2026	5	0.5064	0.0014	28.37	11	2.7090	0.0014
	2.9662	2.5684	2.8879	18.18	7	2.5610	4	0.3265	0.0014	28.42	11	2.8875	0.0014
	3.1551	2.7656	3.0710	18.62	7	2.7263	4	0.3442	0.0015	28.46	11	3.0705	0.0015
	3.3486	2.9656	3.2585	19.01	7	2.8958	4	0.3621	0.0016	28.50	11	3.2579	0.0016

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	2.2587	1.4206	2.2013	11.31	4	1.3371	6	0.8497	0.0156	28.22	10	2.1869	0.0156
	2.4282	1.6534	2.3659	12.52	4	1.4431	7	0.9227	0.0012	28.26	11	2.3659	0.0012
	2.6027	1.8773	2.5353	13.53	5	1.8257	6	0.7094	0.0013	28.33	11	2.5351	0.0013
	2.7821	2.0956	2.7093	14.38	5	1.9564	6	0.7526	0.0014	28.37	11	2.7090	0.0014
	2.9662	2.3116	2.8879	15.11	5	2.0911	6	0.7965	0.0014	28.42	11	2.8875	0.0014
	3.1551	2.5264	3.0710	15.75	6	2.5056	5	0.5649	0.0015	28.46	11	3.0705	0.0015
	3.3486	2.7412	3.2585	16.32	6	2.6632	5	0.5948	0.0016	28.50	11	3.2579	0.0016

Jack Pine Sawlog and Pulp Volume Estimates

30 metre

Total Height - 30 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.2587	2.1924	2.2013	26.31	10	2.1869	0	0.0000	0.0156	28.22	10	2.1869	0.0156
50	2.4282	2.3574	2.3659	26.43	10	2.3505	1	0.0153	0.0012	28.28	11	2.3659	0.0012
52	2.6027	2.5270	2.5353	26.54	10	2.5189	1	0.0163	0.0013	28.33	11	2.5351	0.0013
54	2.7821	2.7013	2.7093	26.64	10	2.6919	1	0.0172	0.0014	28.37	11	2.7090	0.0014
56	2.9662	2.8801	2.8879	26.73	10	2.8694	1	0.0181	0.0014	28.42	11	2.8875	0.0014
58	3.1551	3.0634	3.0710	26.82	10	3.0515	1	0.0190	0.0015	28.46	11	3.0705	0.0015
60	3.3483	3.2512	3.2585	26.90	10	3.2380	1	0.0200	0.0016	28.50	11	3.2579	0.0016

Total Height - 30 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.2587	2.1663	2.2013	24.22	9	2.1444	1	0.0424	0.0156	28.22	10	2.1869	0.0156
50	2.4282	2.3322	2.3659	24.42	9	2.3054	2	0.0605	0.0012	28.28	11	2.3659	0.0012
52	2.6027	2.5028	2.5353	24.60	9	2.4711	2	0.0641	0.0013	28.33	11	2.5351	0.0013
54	2.7821	2.6779	2.7093	24.76	9	2.6413	2	0.0677	0.0014	28.37	11	2.7090	0.0014
56	2.9662	2.8575	2.8879	24.92	9	2.8161	2	0.0715	0.0014	28.42	11	2.8875	0.0014
58	3.1551	3.0415	3.0710	25.06	9	2.9953	2	0.0752	0.0015	28.46	11	3.0705	0.0015
60	3.3486	3.2299	3.2585	25.20	9	3.1789	2	0.0791	0.0016	28.50	11	3.2579	0.0016

Total Height - 30 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.2587	2.1092	2.2013	21.88	8	2.0647	2	0.1222	0.0156	28.22	10	2.1869	0.0156
50	2.4282	2.2777	2.3659	22.18	8	2.2205	3	0.1454	0.0012	28.28	11	2.3659	0.0012
52	2.6027	2.4506	2.5353	22.46	8	2.3809	3	0.1542	0.0013	28.33	11	2.5351	0.0013
54	2.7821	2.6278	2.7093	22.71	8	2.5459	3	0.1631	0.0014	28.37	11	2.7090	0.0014
56	2.9662	2.8092	2.8879	22.94	8	2.7153	3	0.1722	0.0014	28.42	11	2.8875	0.0014
58	3.1551	2.9950	3.0710	23.15	8	2.8891	3	0.1814	0.0015	28.46	11	3.0705	0.0015
60	3.3486	3.1849	3.2585	23.35	9	3.1789	2	0.0791	0.0016	28.50	11	3.2579	0.0016

Total Height - 30 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.2587	2.0003	2.2013	19.17	7	1.9430	3	0.2438	0.0156	28.22	10	2.1869	0.0156
50	2.4282	2.1750	2.3659	19.62	7	2.0909	4	0.2749	0.0012	28.28	11	2.3659	0.0012
52	2.6027	2.3532	2.5353	20.03	7	2.2433	4	0.2919	0.0013	28.33	11	2.5351	0.0013
54	2.7821	2.5350	2.7093	20.39	7	2.4000	4	0.3091	0.0014	28.37	11	2.7090	0.0014
56	2.9662	2.7206	2.8879	20.73	8	2.7153	3	0.1722	0.0014	28.42	11	2.8875	0.0014
58	3.1551	2.9100	3.0710	21.03	8	2.8891	3	0.1814	0.0015	28.46	11	3.0705	0.0015
60	3.3486	3.1033	3.2585	21.31	8	3.0672	3	0.1907	0.0016	28.50	11	3.2579	0.0016

Jack Pine Sawlog and Pulp Volume Estimates

30 metre

Total Height - 30 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper (bark) (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.2587	1.8005	2.2013	15.84	6	1.7792	4	0.4076	0.0156	28.22	10	2.1869	0.0156
50	2.4282	1.9905	2.3659	16.54	6	1.9162	5	0.4497	0.0012	28.28	11	2.3659	0.0012
52	2.6027	2.1813	2.5353	17.16	6	2.0573	5	0.4778	0.0013	28.33	11	2.5351	0.0013
54	2.7821	2.3737	2.7093	17.70	6	2.2026	5	0.5064	0.0014	28.37	11	2.7090	0.0014
56	2.9662	2.5684	2.8879	18.18	7	2.5610	4	0.3265	0.0014	28.42	11	2.8875	0.0014
58	3.1551	2.7656	3.0710	18.62	7	2.7263	4	0.3442	0.0015	28.46	11	3.0705	0.0015
60	3.3486	2.9658	3.2585	19.01	7	2.8958	4	0.3621	0.0016	28.50	11	3.2579	0.0016

Total Height - 30 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper (bark) (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.2587	1.4206	2.2013	11.31	4	1.3371	6	0.8497	0.0156	28.22	10	2.1869	0.0156
50	2.4282	1.6534	2.3659	12.52	4	1.4431	7	0.9227	0.0012	28.28	11	2.3659	0.0012
52	2.6027	1.8773	2.5353	13.53	5	1.8257	6	0.7094	0.0013	28.33	11	2.5351	0.0013
54	2.7821	2.0958	2.7093	14.38	5	1.9564	6	0.7526	0.0014	28.37	11	2.7090	0.0014
56	2.9662	2.3116	2.8879	15.11	5	2.0911	6	0.7965	0.0014	28.42	11	2.8875	0.0014
58	3.1551	2.5264	3.0710	15.75	6	2.5056	5	0.5649	0.0015	28.46	11	3.0705	0.0015
60	3.3486	2.7412	3.2585	16.32	6	2.6632	5	0.5948	0.0016	28.50	11	3.2579	0.0016

Appendix A-2
Jack Pine Utility Pole and Pulp Volume Tables

Jack Pine Utility Poles

(Maximized for Pole Class)

12 metre

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
	0.1817	7	20.0-24.9	6.10-7.59	0.1487	1	0.0189	0.0029
	0.2168	6	20.0-24.9	6.10-7.59	0.1729	1	0.0253	0.0050
	0.2548	5	20.0-24.9	6.10-7.59	0.1979	1	0.0326	0.0078
	0.2955	5	20.0-24.9	6.10-7.59	0.2401	1	0.0306	0.0052
	0.3390	4	20.0-24.9	6.10-7.59	0.2693	1	0.0387	0.0081

14 metre

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
	0.2102	6	20.0-24.9	6.10-7.59	0.1585	1	0.0288	0.0122
	0.2505	5	20.0-24.9	6.10-7.59	0.1831	2	0.0525	0.0019
	0.2940	4	20.0-24.9	6.10-7.59	0.2082	2	0.0667	0.0034
	0.3405	4	20.0-24.9	6.10-7.59	0.2613	2	0.0594	0.0012
	0.3900	3	20.0-24.9	6.10-7.59	0.2914	2	0.0745	0.0023
	0.4425	2	20.0-24.9	6.10-7.59	0.3220	2	0.0914	0.0039
	0.4980	2	20.0-24.9	6.10-7.59	0.3834	2	0.0838	0.0018
	0.5564	1	20.0-24.9	6.10-7.59	0.4185	2	0.1017	0.0031
	0.6176	1	20.0-24.9	6.10-7.59	0.4843	2	0.0945	0.0015
	0.6818	1	20.0-24.9	6.10-7.59	0.5509	1	0.0677	0.0212
	0.7488	1	25.0-29.9	7.62-9.11	0.6188	1	0.0656	0.0174
	0.8186	1	25.0-29.9	7.62-9.11	0.6864	1	0.0636	0.0143
	0.8913	1	25.0-29.9	7.62-9.11	0.7597	1	0.0618	0.0119
	0.9668	1	25.0-29.9	7.62-9.11	0.8330	1	0.0601	0.0099
	1.0452	1	25.0-29.9	7.62-9.11	0.9084	1	0.0584	0.0082
	1.1263	1	25.0-29.9	7.62-9.11	0.9858	1	0.0569	0.0068
	1.2102	1	30.0-34.9	9.14-10.64	1.0654	1	0.0554	0.0057
	1.2970	1	30.0-34.9	9.14-10.64	1.1472	1	0.0540	0.0047

16 metre

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
	0.3348	4	20.0-24.9	6.10-7.59	0.2403	2	0.0724	0.0070
	0.3875	3	20.0-24.9	6.10-7.59	0.2697	2	0.0695	0.0105
	0.4436	2	20.0-24.9	6.10-7.59	0.2993	2	0.1084	0.0150
	0.5029	1	20.0-24.9	6.10-7.59	0.3292	3	0.1477	0.0018
	0.5654	1	20.0-24.9	6.10-7.59	0.4059	2	0.1195	0.0123
	0.6311	1	25.0-29.9	7.62-9.11	0.4809	2	0.1112	0.0074
	0.7000	1	25.0-29.9	7.62-9.11	0.5558	2	0.1041	0.0044
	0.7720	1	25.0-29.9	7.62-9.11	0.6316	2	0.0978	0.0025
	0.8470	1	30.0-34.9	9.14-10.64	0.7087	2	0.0923	0.0014
	0.9251	1	30.0-34.9	9.14-10.64	0.7875	1	0.0671	0.0209
	1.0062	1	30.0-34.9	9.14-10.64	0.8682	1	0.0653	0.0178
	1.0904	1	30.0-34.9	9.14-10.64	0.9511	1	0.0637	0.0152
	1.1775	1	30.0-34.9	9.14-10.64	1.0361	1	0.0622	0.0130
	1.2676	1	30.0-34.9	9.14-10.64	1.1233	1	0.0606	0.0111
	1.3607	1	30.0-34.9	9.14-10.64	1.2129	1	0.0594	0.0096
	1.4567	1	35.0-39.9	10.67-12.16	1.3049	1	0.0580	0.0082
	1.5557	1	35.0-39.9	10.67-12.16	1.3992	1	0.0568	0.0070
	1.6576	1	35.0-39.9	10.67-12.16	1.4959	1	0.0555	0.0061
	1.7624	1	35.0-39.9	10.67-12.16	1.5950	1	0.0544	0.0052

Jack Pine Utility Poles

(Maximized for Pole Class)

12 metre

Total Height - 12 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
20	0.1817	7	20.0-24.9	6.10-7.59	0.1487	1	0.0189	0.0029
22	0.2168	6	20.0-24.9	6.10-7.59	0.1729	1	0.0253	0.0050
24	0.2548	5	20.0-24.9	6.10-7.59	0.1979	1	0.0326	0.0078
26	0.2955	5	20.0-24.9	6.10-7.59	0.2401	1	0.0306	0.0052
28	0.3390	4	20.0-24.9	6.10-7.59	0.2693	1	0.0387	0.0081

14 metre

Total Height - 14 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
20	0.2102	6	20.0-24.9	6.10-7.59	0.1585	1	0.0288	0.0122
22	0.2505	5	20.0-24.9	6.10-7.59	0.1831	2	0.0525	0.0019
24	0.2940	4	20.0-24.9	6.10-7.59	0.2082	2	0.0667	0.0034
26	0.3405	4	20.0-24.9	6.10-7.59	0.2613	2	0.0594	0.0012
28	0.3900	3	20.0-24.9	6.10-7.59	0.2914	2	0.0745	0.0023
30	0.4425	2	20.0-24.9	6.10-7.59	0.3220	2	0.0914	0.0039
32	0.4980	2	20.0-24.9	6.10-7.59	0.3834	2	0.0838	0.0018
34	0.5564	1	20.0-24.9	6.10-7.59	0.4185	2	0.1017	0.0031
36	0.6176	1	20.0-24.9	6.10-7.59	0.4843	2	0.0945	0.0015
38	0.6818	1	20.0-24.9	6.10-7.59	0.5509	1	0.0677	0.0212
40	0.7488	1	25.0-29.9	7.62-9.11	0.6188	1	0.0656	0.0174
42	0.8186	1	25.0-29.9	7.62-9.11	0.6884	1	0.0636	0.0143
44	0.8913	1	25.0-29.9	7.62-9.11	0.7597	1	0.0618	0.0119
46	0.9668	1	25.0-29.9	7.62-9.11	0.8330	1	0.0601	0.0099
48	1.0452	1	25.0-29.9	7.62-9.11	0.9084	1	0.0584	0.0082
50	1.1263	1	25.0-29.9	7.62-9.11	0.9858	1	0.0569	0.0068
52	1.2102	1	30.0-34.9	9.14-10.64	1.0654	1	0.0554	0.0057
54	1.2970	1	30.0-34.9	9.14-10.64	1.1472	1	0.0540	0.0047

16 metre

Total Height - 16 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
24	0.3348	4	20.0-24.9	6.10-7.59	0.2403	2	0.0724	0.0070
26	0.3875	3	20.0-24.9	6.10-7.59	0.2697	2	0.0895	0.0105
28	0.4436	2	20.0-24.9	6.10-7.59	0.2993	2	0.1084	0.0150
30	0.5029	1	20.0-24.9	6.10-7.59	0.3292	3	0.1477	0.0018
32	0.5654	1	20.0-24.9	6.10-7.59	0.4059	2	0.1195	0.0123
34	0.6311	1	25.0-29.9	7.62-9.11	0.4809	2	0.1112	0.0074
36	0.7000	1	25.0-29.9	7.62-9.11	0.5558	2	0.1041	0.0044
38	0.7720	1	25.0-29.9	7.62-9.11	0.6316	2	0.0978	0.0025
40	0.8470	1	30.0-34.9	9.14-10.64	0.7087	2	0.0923	0.0014
42	0.9251	1	30.0-34.9	9.14-10.64	0.7875	1	0.0671	0.0209
44	1.0062	1	30.0-34.9	9.14-10.64	0.8682	1	0.0653	0.0178
46	1.0904	1	30.0-34.9	9.14-10.64	0.9511	1	0.0637	0.0152
48	1.1775	1	30.0-34.9	9.14-10.64	1.0361	1	0.0622	0.0130
50	1.2676	1	30.0-34.9	9.14-10.64	1.1233	1	0.0608	0.0111
52	1.3607	1	30.0-34.9	9.14-10.64	1.2129	1	0.0594	0.0096
54	1.4567	1	35.0-39.9	10.67-12.16	1.3049	1	0.0580	0.0082
56	1.5557	1	35.0-39.9	10.67-12.16	1.3992	1	0.0568	0.0070
58	1.6576	1	35.0-39.9	10.67-12.16	1.4959	1	0.0555	0.0061
60	1.7624	1	35.0-39.9	10.67-12.16	1.5950	1	0.0544	0.0052

Jack Pine Utility Poles

(Maximized for Pole Class)

18 metre

Total Height - 18 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
24	0.3769	7	35.0-39.9	10.67-12.16	0.3377	1	0.0198	0.0047
26	0.4362	5	30.0-34.9	9.14-10.64	0.3671	2	0.0499	0.0017
28	0.4991	2	20.0-24.9	6.10-7.59	0.3412	3	0.1343	0.0033
30	0.5656	1	20.0-24.9	6.10-7.59	0.3751	3	0.1617	0.0053
32	0.6356	1	25.0-29.9	7.62-9.11	0.4621	3	0.1448	0.0018
34	0.7091	1	25.0-29.9	7.62-9.11	0.5469	2	0.1188	0.0130
36	0.7861	1	30.0-34.9	9.14-10.64	0.6313	2	0.1118	0.0085
38	0.8664	1	30.0-34.9	9.14-10.64	0.7166	2	0.1057	0.0056
40	0.9501	1	30.0-34.9	9.14-10.64	0.8034	2	0.1002	0.0036
42	1.0371	1	35.0-39.9	10.67-12.16	0.8919	2	0.0952	0.0022
44	1.1274	1	35.0-39.9	10.67-12.16	0.9826	2	0.0907	0.0013
46	1.2209	1	35.0-39.9	10.67-12.16	1.0756	1	0.0666	0.0208
48	1.3176	1	35.0-39.9	10.67-12.16	1.1709	1	0.0652	0.0181
50	1.4175	1	35.0-39.9	10.67-12.16	1.2686	1	0.0638	0.0158
52	1.5205	1	35.0-39.9	10.67-12.16	1.3686	1	0.0625	0.0138
54	1.6267	1	40.0-44.9	12.19-13.69	1.4716	1	0.0612	0.0121
56	1.7360	1	40.0-44.9	12.19-13.69	1.5769	1	0.0600	0.0107
58	1.8484	1	40.0-44.9	12.19-13.69	1.6848	1	0.0589	0.0094
60	1.9639	1	40.0-44.9	12.19-13.69	1.7953	1	0.0578	0.0082

20 metre

Total Height - 20 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
28	0.5560	6	40.0-44.9	12.19-13.69	0.5019	1	0.0263	0.0080
30	0.6301	4	35.0-39.9	10.67-12.16	0.5404	2	0.0635	0.0033
32	0.7080	4	40.0-44.9	12.19-13.69	0.6205	2	0.0594	0.0019
34	0.7897	3	35.0-39.9	10.67-12.16	0.6814	2	0.0750	0.0035
36	0.8752	2	35.0-39.9	10.67-12.16	0.7431	2	0.0926	0.0060
38	0.9644	1	35.0-39.9	10.67-12.16	0.8052	2	0.1122	0.0094
40	1.0572	1	35.0-39.9	10.67-12.16	0.9020	2	0.1068	0.0066
42	1.1536	1	40.0-44.9	12.19-13.69	1.0008	2	0.1019	0.0045
44	1.2535	1	40.0-44.9	12.19-13.69	1.1019	2	0.0975	0.0031
46	1.3570	1	40.0-44.9	12.19-13.69	1.2054	2	0.0934	0.0020
48	1.4639	1	40.0-44.9	12.19-13.69	1.3115	2	0.0896	0.0013
50	1.5742	1	40.0-44.9	12.19-13.69	1.4203	1	0.0662	0.0207
52	1.6879	1	40.0-44.9	12.19-13.69	1.5318	1	0.0650	0.0184
54	1.8050	1	45.0-49.9	13.72-15.21	1.6460	1	0.0638	0.0163
56	1.9254	1	45.0-49.9	13.72-15.21	1.7630	1	0.0627	0.0145
58	2.0492	1	45.0-49.9	13.72-15.21	1.8827	1	0.0616	0.0130
60	2.1762	1	45.0-49.9	13.72-15.21	2.0053	1	0.0605	0.0116

22 metre

Total Height - 22 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
28	0.6142	6	45.0-49.9	13.72-15.21	0.5576	1	0.0271	0.0100
32	0.7821	5	45.0-49.9	13.72-15.21	0.7098	1	0.0339	0.0127
34	0.8724	3	40.0-44.9	12.19-13.69	0.7583	2	0.0792	0.0058
36	0.9667	3	45.0-49.9	13.72-15.21	0.8550	2	0.0751	0.0038
38	1.0651	2	40.0-44.9	12.19-13.69	0.9291	2	0.0927	0.0065
40	1.1675	1	40.0-44.9	12.19-13.69	1.0040	2	0.1124	0.0102
42	1.2737	1	40.0-44.9	12.19-13.69	1.1134	2	0.1077	0.0074
44	1.3838	1	45.0-49.9	13.72-15.21	1.2252	2	0.1033	0.0054
46	1.4977	1	45.0-49.9	13.72-15.21	1.3398	2	0.0993	0.0039
48	1.6154	1	45.0-49.9	13.72-15.21	1.4572	2	0.0955	0.0027
50	1.7367	1	45.0-49.9	13.72-15.21	1.5775	2	0.0921	0.0019
52	1.8617	1	45.0-49.9	13.72-15.21	1.7007	2	0.0888	0.0013
54	1.9903	1	50.0-54.9	15.24-16.73	1.8269	1	0.0660	0.0207
56	2.1225	1	50.0-54.9	15.24-16.73	1.9562	1	0.0649	0.0186
58	2.2582	1	50.0-54.9	15.24-16.73	2.0884	1	0.0638	0.0168
60	2.3974	1	50.0-54.9	15.24-16.73	2.2236	1	0.0628	0.0151

Jack Pine Utility Poles

(Maximized for Pole Class)

24 metre

Total Height - 24 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
32	0.8577	5	50.0-54.9	15.24-16.73	0.7824	2	0.0484	0.0017
36	1.0603	4	50.0-54.9	15.24-16.73	0.9664	2	0.0594	0.0022
38	1.1682	3	50.0-54.9	15.24-16.73	1.0529	2	0.0751	0.0041
40	1.2804	2	50.0-54.9	15.24-16.73	1.1405	2	0.0929	0.0070
42	1.3969	1	45.0-49.9	13.72-15.21	1.2290	2	0.1126	0.0109
44	1.5176	1	50.0-54.9	15.24-16.73	1.3521	2	0.1084	0.0082
46	1.6423	1	50.0-54.9	15.24-16.73	1.4781	2	0.1044	0.0062
48	1.7712	1	50.0-54.9	15.24-16.73	1.6071	2	0.1007	0.0047
50	1.9040	1	50.0-54.9	15.24-16.73	1.7394	2	0.0973	0.0035
52	2.0407	1	50.0-54.9	15.24-16.73	1.8748	2	0.0941	0.0025
54	2.1814	1	55.0-59.9	16.76-18.26	2.0135	2	0.0911	0.0018
56	2.3259	1	55.0-59.9	16.76-18.26	2.1554	2	0.0882	0.0013
58	2.4742	1	55.0-59.9	16.76-18.26	2.3006	2	0.0855	0.0009
60	2.6263	1	55.0-59.9	16.76-18.26	2.4491	1	0.0648	0.0188

26 metre

Total Height - 26 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
36	1.1555	4	55.0-59.9	16.76-18.26	1.0580	2	0.0623	0.0034
38	1.2732	4	60.0-64.9	18.29-19.78	1.1759	2	0.0594	0.0023
40	1.3957	3	55.0-59.9	16.76-18.26	1.2766	2	0.0752	0.0043
42	1.5227	2	55.0-59.9	16.76-18.26	1.3786	2	0.0930	0.0073
44	1.6543	1	55.0-59.9	16.76-18.26	1.4818	2	0.1128	0.0115
46	1.7903	1	55.0-59.9	16.76-18.26	1.6196	2	0.1089	0.0090
48	1.9306	1	55.0-59.9	16.76-18.26	1.7607	2	0.1053	0.0070
50	2.0753	1	55.0-59.9	16.76-18.26	1.9053	2	0.1020	0.0054
52	2.2243	1	55.0-59.9	16.76-18.26	2.0533	2	0.0988	0.0041
54	2.3775	1	60.0-64.9	18.29-19.78	2.2049	2	0.0958	0.0032
56	2.5348	1	60.0-64.9	18.29-19.78	2.3600	2	0.0929	0.0024
58	2.6962	1	60.0-64.9	18.29-19.78	2.5187	2	0.0903	0.0018
60	2.8616	1	60.0-64.9	18.29-19.78	2.6809	2	0.0877	0.0013

28 metre

Total Height - 28 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
38	1.3799	4	>=65.0	>=19.81	1.2793	2	0.0621	0.0034
40	1.5128	3	60.0-64.9	18.29-19.78	1.3894	2	0.0783	0.0061
42	1.6507	3	60.0-64.9	18.29-19.78	1.5276	2	0.0753	0.0046
44	1.7934	2	60.0-64.9	18.29-19.78	1.6451	2	0.0931	0.0077
46	1.9410	1	60.0-64.9	18.29-19.78	1.7639	2	0.1130	0.0120
48	2.0933	1	60.0-64.9	18.29-19.78	1.9174	2	0.1094	0.0096
50	2.2503	1	60.0-64.9	18.29-19.78	2.0746	2	0.1061	0.0076
52	2.4118	1	60.0-64.9	18.29-19.78	2.2357	2	0.1030	0.0061
54	2.5779	1	>=65.0	>=19.81	2.4005	2	0.1000	0.0048
56	2.7484	1	>=65.0	>=19.81	2.5692	2	0.0972	0.0038
58	2.9234	1	>=65.0	>=19.81	2.7417	2	0.0946	0.0029
60	3.1026	1	>=65.0	>=19.81	2.9181	2	0.0920	0.0023

Jack Pine Utility Poles

(Maximized for Pole Class)

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
	0.3769	7	35.0-39.9	10.67-12.16	0.3377	1	0.0198	0.0047
	0.4362	5	30.0-34.9	9.14-10.64	0.3671	2	0.0499	0.0017
	0.4991	2	20.0-24.9	6.10-7.59	0.3412	3	0.1343	0.0033
	0.5656	1	20.0-24.9	6.10-7.59	0.3751	3	0.1617	0.0053
	0.6356	1	25.0-29.9	7.62-9.11	0.4621	3	0.1448	0.0018
	0.7091	1	25.0-29.9	7.62-9.11	0.5469	2	0.1186	0.0130
	0.7861	1	30.0-34.9	9.14-10.64	0.6313	2	0.1118	0.0085
	0.8664	1	30.0-34.9	9.14-10.64	0.7166	2	0.1057	0.0056
	0.9501	1	30.0-34.9	9.14-10.64	0.8034	2	0.1002	0.0036
	1.0371	1	35.0-39.9	10.67-12.16	0.8919	2	0.0952	0.0022
	1.1274	1	35.0-39.9	10.67-12.16	0.9826	2	0.0907	0.0013
	1.2209	1	35.0-39.9	10.67-12.16	1.0756	1	0.0666	0.0208
	1.3176	1	35.0-39.9	10.67-12.16	1.1709	1	0.0652	0.0181
	1.4175	1	35.0-39.9	10.67-12.16	1.2686	1	0.0638	0.0158
	1.5205	1	35.0-39.9	10.67-12.16	1.3686	1	0.0625	0.0136
	1.6267	1	40.0-44.9	12.19-13.69	1.4716	1	0.0612	0.0121
	1.7360	1	40.0-44.9	12.19-13.69	1.5769	1	0.0600	0.0107
	1.8484	1	40.0-44.9	12.19-13.69	1.6848	1	0.0589	0.0094
	1.9639	1	40.0-44.9	12.19-13.69	1.7953	1	0.0578	0.0082

20 metre

Total Height - 20 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
	0.5560	6	40.0-44.9	12.19-13.69	0.5019	1	0.0263	0.0080
	0.6301	4	35.0-39.9	10.67-12.16	0.5404	2	0.0635	0.0033
	0.7080	4	40.0-44.9	12.19-13.69	0.6205	2	0.0594	0.0019
	0.7897	3	35.0-39.9	10.67-12.16	0.6814	2	0.0750	0.0035
	0.8752	2	35.0-39.9	10.67-12.16	0.7431	2	0.0926	0.0060
	0.9644	1	35.0-39.9	10.67-12.16	0.8052	2	0.1122	0.0094
	1.0572	1	35.0-39.9	10.67-12.16	0.9020	2	0.1066	0.0066
	1.1536	1	40.0-44.9	12.19-13.69	1.0006	2	0.1019	0.0045
	1.2535	1	40.0-44.9	12.19-13.69	1.1019	2	0.0975	0.0031
	1.3570	1	40.0-44.9	12.19-13.69	1.2054	2	0.0934	0.0020
	1.4639	1	40.0-44.9	12.19-13.69	1.3115	2	0.0896	0.0013
	1.5742	1	40.0-44.9	12.19-13.69	1.4203	1	0.0662	0.0207
	1.6879	1	40.0-44.9	12.19-13.69	1.5318	1	0.0650	0.0184
	1.8050	1	45.0-49.9	13.72-15.21	1.6460	1	0.0638	0.0163
	1.9254	1	45.0-49.9	13.72-15.21	1.7630	1	0.0627	0.0145
	2.0492	1	45.0-49.9	13.72-15.21	1.8827	1	0.0616	0.0130
	2.1762	1	45.0-49.9	13.72-15.21	2.0053	1	0.0605	0.0116

22 metre

Total Height - 22 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
	0.6142	6	45.0-49.9	13.72-15.21	0.5576	1	0.0271	0.0100
	0.7821	5	45.0-49.9	13.72-15.21	0.7098	1	0.0339	0.0127
	0.8724	3	40.0-44.9	12.19-13.69	0.7583	2	0.0792	0.0058
	0.9667	3	45.0-49.9	13.72-15.21	0.8550	2	0.0751	0.0038
	1.0651	2	40.0-44.9	12.19-13.69	0.9291	2	0.0927	0.0065
	1.1675	1	40.0-44.9	12.19-13.69	1.0040	2	0.1124	0.0102
	1.2737	1	40.0-44.9	12.19-13.69	1.1134	2	0.1077	0.0074
	1.3838	1	45.0-49.9	13.72-15.21	1.2252	2	0.1033	0.0054
	1.4977	1	45.0-49.9	13.72-15.21	1.3398	2	0.0993	0.0039
	1.6154	1	45.0-49.9	13.72-15.21	1.4572	2	0.0955	0.0027
	1.7367	1	45.0-49.9	13.72-15.21	1.5775	2	0.0921	0.0019
	1.8617	1	45.0-49.9	13.72-15.21	1.7007	2	0.0886	0.0013
	1.9903	1	50.0-54.9	15.24-16.73	1.8269	1	0.0660	0.0207
	2.1225	1	50.0-54.9	15.24-16.73	1.9562	1	0.0649	0.0186
	2.2582	1	50.0-54.9	15.24-16.73	2.0884	1	0.0638	0.0168
	2.3974	1	50.0-54.9	15.24-16.73	2.2236	1	0.0626	0.0151

Jack Pine Utility Poles

(Maximized for Pole Class)

24 metre

Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
0.8577	5	50.0-54.9	15.24-16.73	0.7824	2	0.0484	0.0017
1.0603	4	50.0-54.9	15.24-16.73	0.9664	2	0.0594	0.0022
1.1682	3	50.0-54.9	15.24-16.73	1.0529	2	0.0751	0.0041
1.2804	2	50.0-54.9	15.24-16.73	1.1405	2	0.0929	0.0070
1.3969	1	45.0-49.9	13.72-15.21	1.2290	2	0.1126	0.0109
1.5176	1	50.0-54.9	15.24-16.73	1.3521	2	0.1084	0.0082
1.6423	1	50.0-54.9	15.24-16.73	1.4781	2	0.1044	0.0062
1.7712	1	50.0-54.9	15.24-16.73	1.6071	2	0.1007	0.0047
1.9040	1	50.0-54.9	15.24-16.73	1.7394	2	0.0973	0.0035
2.0407	1	50.0-54.9	15.24-16.73	1.8748	2	0.0941	0.0025
2.1814	1	55.0-59.9	16.76-18.26	2.0135	2	0.0911	0.0018
2.3259	1	55.0-59.9	16.76-18.26	2.1554	2	0.0882	0.0013
2.4742	1	55.0-59.9	16.76-18.26	2.3006	2	0.0855	0.0009
2.6263	1	55.0-59.9	16.76-18.26	2.4491	1	0.0648	0.0186

26 metre

Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
1.1555	4	55.0-59.9	16.76-18.26	1.0580	2	0.0623	0.0034
1.2732	4	60.0-64.9	18.29-19.78	1.1759	2	0.0594	0.0023
1.3957	3	55.0-59.9	16.76-18.26	1.2766	2	0.0752	0.0043
1.5227	2	55.0-59.9	16.76-18.26	1.3786	2	0.0930	0.0073
1.6543	1	55.0-59.9	16.76-18.26	1.4818	2	0.1128	0.0115
1.7903	1	55.0-59.9	16.76-18.26	1.6196	2	0.1089	0.0090
1.9306	1	55.0-59.9	16.76-18.26	1.7607	2	0.1053	0.0070
2.0753	1	55.0-59.9	16.76-18.26	1.9053	2	0.1020	0.0054
2.2243	1	55.0-59.9	16.76-18.26	2.0533	2	0.0988	0.0041
2.3775	1	60.0-64.9	18.29-19.78	2.2049	2	0.0958	0.0032
2.5348	1	60.0-64.9	18.29-19.78	2.3600	2	0.0929	0.0024
2.6962	1	60.0-64.9	18.29-19.78	2.5187	2	0.0903	0.0018
2.8616	1	60.0-64.9	18.29-19.78	2.6809	2	0.0877	0.0013

28 metre

Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
1.3799	4	>=65.0	>=19.81	1.2793	2	0.0621	0.0034
1.5128	3	60.0-64.9	18.29-19.78	1.3894	2	0.0783	0.0061
1.6507	3	60.0-64.9	18.29-19.78	1.5276	2	0.0753	0.0046
1.7934	2	60.0-64.9	18.29-19.78	1.6451	2	0.0931	0.0077
1.9410	1	60.0-64.9	18.29-19.78	1.7639	2	0.1130	0.0120
2.0933	1	60.0-64.9	18.29-19.78	1.9174	2	0.1094	0.0096
2.2503	1	60.0-64.9	18.29-19.78	2.0746	2	0.1061	0.0076
2.4118	1	60.0-64.9	18.29-19.78	2.2357	2	0.1030	0.0061
2.5779	1	>=65.0	>=19.81	2.4005	2	0.1000	0.0048
2.7484	1	>=65.0	>=19.81	2.5692	2	0.0972	0.0038
2.9234	1	>=65.0	>=19.81	2.7417	2	0.0946	0.0029
3.1026	1	>=65.0	>=19.81	2.9181	2	0.0920	0.0023

Jack Pine Utility Poles

(Maximized for Pole Class)

30 metre

[redacted] 20 m [redacted]

Dbh [redacted]	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
[redacted]	2.2587	1	>=65.0	>=19.81	2.0769	2	0.1131	0.0125
[redacted]	2.4282	1	>=65.0	>=19.81	2.2471	2	0.1098	0.0102
[redacted]	2.6027	1	>=65.0	>=19.81	2.4214	2	0.1068	0.0083
[redacted]	2.7821	1	>=65.0	>=19.81	2.5999	2	0.1039	0.0067
[redacted]	2.9662	1	>=65.0	>=19.81	2.7825	2	0.1011	0.0054
[redacted]	3.1551	1	>=65.0	>=19.81	2.9692	2	0.0985	0.0043
[redacted]	3.3486	1	>=65.0	>=19.81	3.1601	2	0.0960	0.0035

Jack Pine Utility Poles

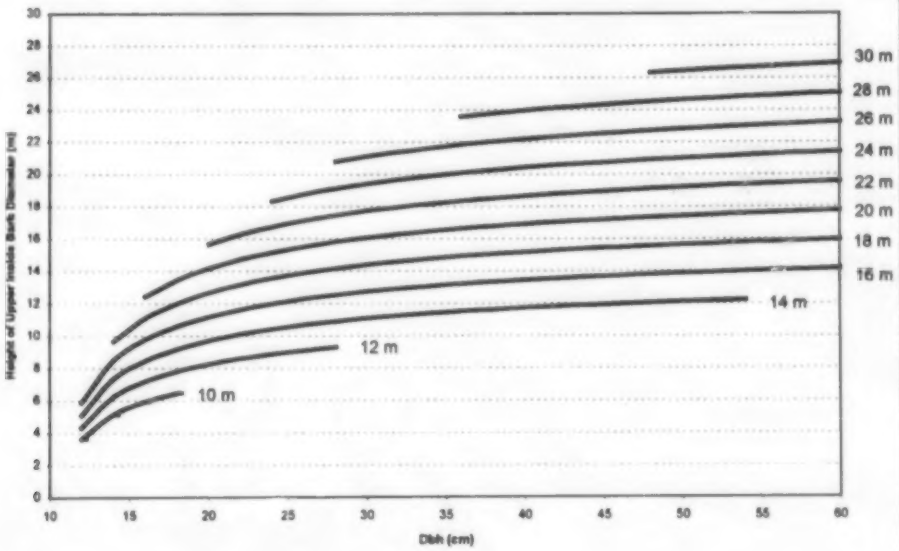
(Maximized for Pole Class)

Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
2.2587	1	>=65.0	>=19.81	2.0769	2	0.1131	0.0125
2.4282	1	>=65.0	>=19.81	2.2471	2	0.1098	0.0102
2.6027	1	>=65.0	>=19.81	2.4214	2	0.1068	0.0093
2.7821	1	>=65.0	>=19.81	2.5999	2	0.1039	0.0067
2.9662	1	>=65.0	>=19.81	2.7825	2	0.1011	0.0054
3.1551	1	>=65.0	>=19.81	2.9692	2	0.0985	0.0043
3.3486	1	>=65.0	>=19.81	3.1601	2	0.0960	0.0035

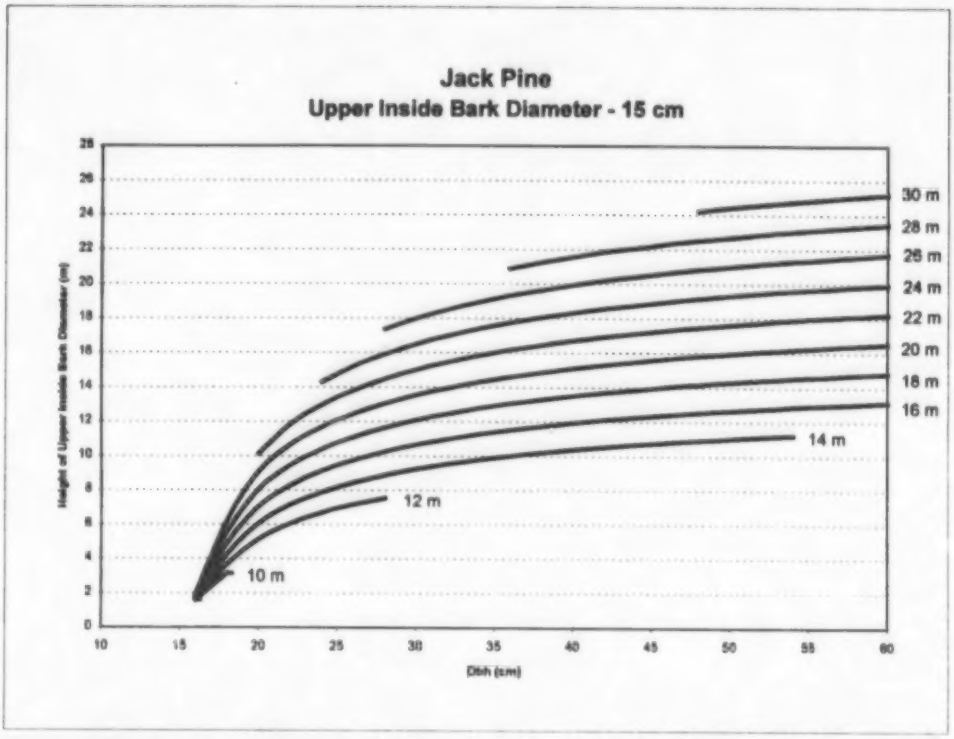
Appendix A-3
Height of Upper Diameter Limits for Jack Pine

Jack Pine

Upper Inside Bark Diameter - 10 cm



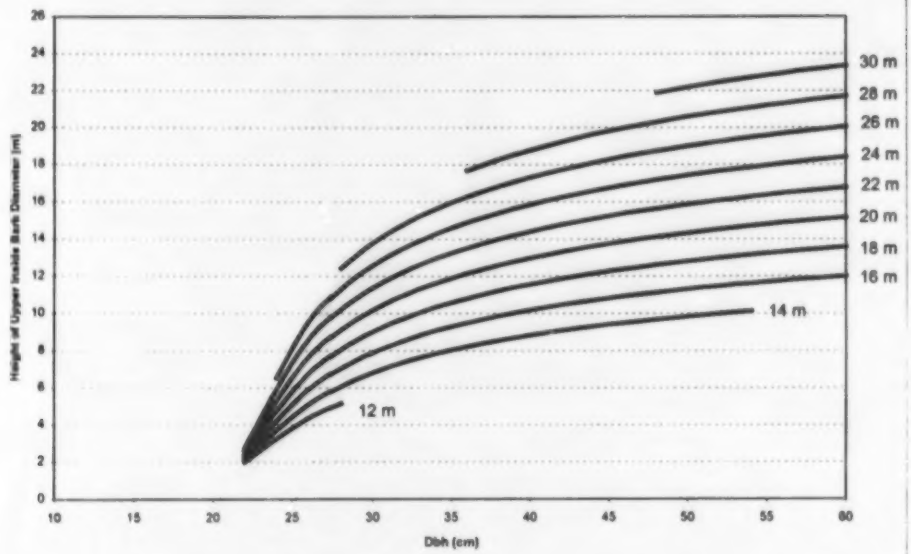
Dbh	Total Height of Tree in metres										
(cm)	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m
10											
12	3.64	4.34	5.09	5.86							
14	5.14	6.22	7.35	8.49	9.66						
16	5.93	7.18	8.46	9.77	11.09	12.42					
18	6.45	7.80	9.18	10.59	12.00	13.43					
20		8.25	9.70	11.17	12.66	14.16	15.66				
22		8.60	10.10	11.62	13.16	14.71	16.26				
24		8.87	10.42	11.98	13.56	15.14	16.74	18.34			
26		9.10	10.68	12.27	13.88	15.50	17.13	18.76			
28		9.29	10.89	12.51	14.15	15.80	17.45	19.11	20.78		
30			11.08	12.72	14.38	16.05	17.73	19.41	21.10		
32			11.24	12.90	14.58	16.27	17.96	19.67	21.38		
34			11.38	13.06	14.75	16.46	18.17	19.89	21.61		
36			11.50	13.20	14.91	16.62	18.35	20.09	21.83	23.57	
38			11.61	13.32	15.04	16.77	18.51	20.26	22.01	23.77	
40			11.71	13.43	15.16	16.91	18.66	20.42	22.18	23.95	
42			11.80	13.53	15.27	17.03	18.79	20.56	22.33	24.11	
44			11.88	13.62	15.38	17.14	18.91	20.68	22.47	24.25	
46			11.96	13.71	15.47	17.24	19.02	20.80	22.59	24.38	
48			12.03	13.78	15.55	17.33	19.11	20.91	22.70	24.51	26.31
50			12.09	13.85	15.63	17.41	19.21	21.00	22.81	24.62	26.43
52			12.15	13.92	15.70	17.49	19.29	21.09	22.91	24.72	26.54
54			12.21	13.98	15.77	17.56	19.37	21.18	22.99	24.82	26.64
56				14.04	15.83	17.63	19.44	21.26	23.08	24.90	26.73
58				14.09	15.89	17.69	19.51	21.33	23.16	24.99	26.82
60				14.14	15.94	17.75	19.57	21.40	23.23	25.06	26.90



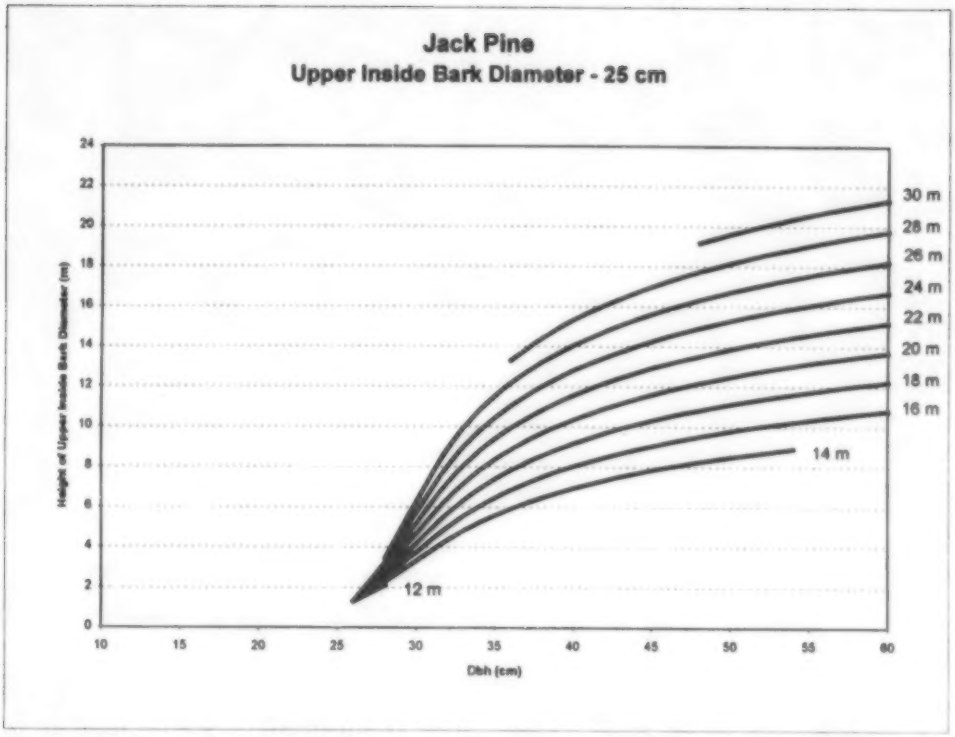
Dbh	Total Height of Tree in metres										
(cm)	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m
10											
12											
14											
16	1.59	1.65	1.71	1.78	1.84	1.91					
18	3.14	3.67	4.26	4.88	5.54	6.23					
20		5.13	6.05	7.02	8.03	9.06	10.12				
22		6.04	7.13	8.26	9.43	10.61	11.82				
24		6.67	7.87	9.11	10.37	11.66	12.96	14.27			
26		7.15	8.43	9.74	11.07	12.43	13.80	15.19			
28		7.53	8.87	10.23	11.63	13.04	14.46	15.90	17.35		
30			9.23	10.64	12.08	13.53	15.00	16.48	17.97		
32			9.53	10.98	12.45	13.94	15.45	16.97	18.49		
34			9.78	11.27	12.77	14.29	15.83	17.38	18.93		
36			10.01	11.51	13.05	14.59	16.16	17.73	19.31	20.90	
38			10.20	11.73	13.29	14.86	16.44	18.04	19.64	21.26	
40			10.38	11.93	13.50	15.09	16.70	18.31	19.94	21.57	
42			10.53	12.10	13.69	15.30	16.92	18.56	20.20	21.85	
44			10.67	12.26	13.86	15.49	17.13	18.77	20.43	22.09	
46			10.80	12.40	14.02	15.66	17.31	18.97	20.64	22.32	
48			10.91	12.53	14.16	15.81	17.48	19.15	20.83	22.52	24.22
50			11.02	12.65	14.29	15.95	17.63	19.31	21.01	22.71	24.42
52			11.12	12.75	14.41	16.08	17.77	19.47	21.17	22.88	24.60
54			11.21	12.86	14.52	16.20	17.90	19.60	21.32	23.04	24.76
56				12.95	14.62	16.32	18.02	19.73	21.45	23.18	24.92
58				13.04	14.72	16.42	18.13	19.85	21.58	23.32	25.06
60				13.12	14.81	16.52	18.23	19.96	21.70	23.45	25.20

Jack Pine

Upper Inside Bark Diameter - 20 cm

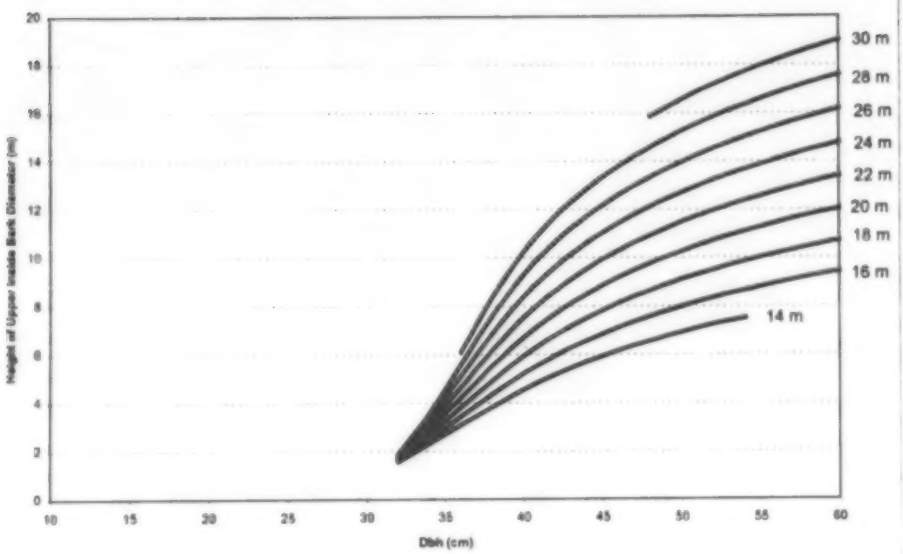


Dbh	Total Height of Tree in metres										
(cm)	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m
10											
12											
14											
16											
18											
20											
22		1.99	2.13	2.27	2.42	2.58	2.73				
24		3.24	3.70	4.20	4.73	5.30	5.91	6.54			
26		4.33	5.07	5.87	6.71	7.60	8.53	9.48			
28		5.15	6.06	7.03	8.05	9.10	10.19	11.29	12.42		
30			6.80	7.88	9.00	10.16	11.35	12.55	13.77		
32			7.37	8.53	9.73	10.97	12.23	13.50	14.79		
34			7.83	9.06	10.32	11.61	12.93	14.26	15.60		
36			8.22	9.49	10.80	12.14	13.50	14.88	16.27	17.68	
38			8.54	9.86	11.21	12.59	13.99	15.41	16.84	18.28	
40			8.83	10.18	11.57	12.98	14.41	15.86	17.32	18.79	
42			9.08	10.46	11.87	13.32	14.78	16.25	17.74	19.24	
44			9.30	10.71	12.15	13.61	15.10	16.60	18.11	19.64	
46			9.49	10.93	12.39	13.88	15.39	16.91	18.44	19.99	
48			9.67	11.13	12.61	14.12	15.64	17.19	18.74	20.30	21.88
50			9.83	11.31	12.81	14.33	15.88	17.44	19.01	20.59	22.18
52			9.98	11.47	12.99	14.53	16.09	17.67	19.25	20.85	22.46
54			10.12	11.62	13.16	14.71	16.29	17.87	19.48	21.09	22.71
56				11.76	13.31	14.88	16.47	18.07	19.68	21.30	22.94
58				11.89	13.45	15.03	16.63	18.24	19.87	21.51	23.15
60				12.01	13.58	15.17	16.78	18.41	20.05	21.69	23.35

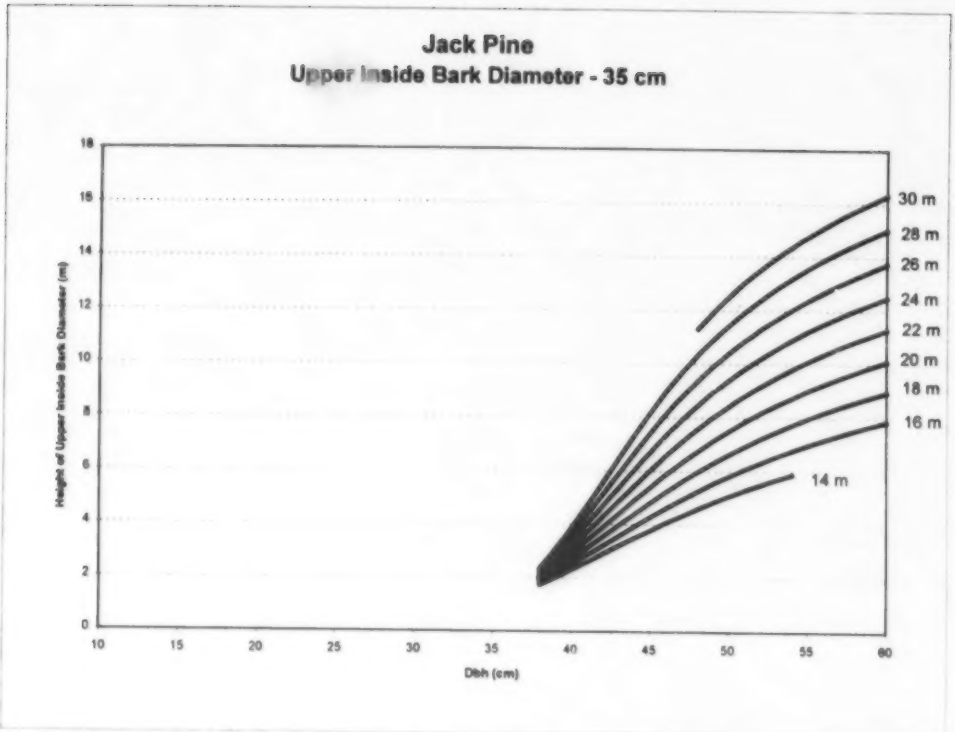


Dbh (cm)	Total Height of Tree in metres										
	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m
10											
12											
14											
16											
18											
20											
22											
24											
26		1.29	1.29	1.29	1.29	1.29	1.29	1.29			
28		2.10	2.27	2.45	2.63	2.83	3.03	3.24	3.45		
30			3.33	3.75	4.19	4.67	5.17	5.71	6.27		
32			4.35	4.99	5.69	6.43	7.22	8.04	8.90		
34			5.21	6.02	6.89	7.81	8.77	9.76	10.79		
36			5.90	6.83	7.82	8.85	9.92	11.02	12.15	13.29	
38			6.47	7.49	8.56	9.68	10.82	12.00	13.20	14.41	
40			6.94	8.03	9.17	10.34	11.55	12.79	14.04	15.32	
42			7.34	8.48	9.67	10.90	12.16	13.44	14.75	16.06	
44			7.68	8.87	10.11	11.38	12.68	14.00	15.34	16.70	
46			7.98	9.21	10.49	11.79	13.13	14.49	15.86	17.25	
48			8.25	9.51	10.82	12.16	13.52	14.91	16.32	17.74	19.17
50			8.49	9.78	11.12	12.48	13.87	15.29	16.72	18.16	19.62
52			8.70	10.02	11.38	12.77	14.19	15.63	17.08	18.55	20.03
54			8.90	10.24	11.62	13.04	14.47	15.93	17.41	18.89	20.39
56				10.44	11.84	13.28	14.73	16.21	17.70	19.21	20.73
58				10.62	12.04	13.49	14.97	16.46	17.97	19.50	21.03
60				10.79	12.23	13.70	15.19	16.70	18.22	19.76	21.31

Jack Pine
Upper Inside Bark Diameter - 30 cm



Dbh	Total Height of Tree in metres										
(cm)	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m
10											
12											
14											
16											
18											
20											
22											
24											
26											
28											
30											
32			1.57	1.62	1.67	1.72	1.77	1.83	1.88		
34			2.31	2.49	2.69	2.90	3.12	3.35	3.59		
36			3.08	3.43	3.81	4.22	4.65	5.11	5.60	6.11	
38			3.84	4.37	4.93	5.55	6.20	6.90	7.64	8.41	
40			4.55	5.22	5.95	6.73	7.56	8.43	9.34	10.29	
42			5.17	5.96	6.81	7.71	8.66	9.65	10.68	11.73	
44			5.70	6.58	7.53	8.52	9.56	10.64	11.74	12.87	
46			6.16	7.12	8.14	9.20	10.31	11.44	12.61	13.80	
48			6.56	7.58	8.66	9.78	10.93	12.13	13.34	14.58	15.84
50			6.92	7.98	9.11	10.27	11.48	12.71	13.97	15.25	16.54
52			7.23	8.34	9.50	10.71	11.95	13.22	14.51	15.83	17.16
54			7.51	8.66	9.85	11.09	12.37	13.67	15.00	16.34	17.70
56				8.94	10.17	11.44	12.74	14.07	15.43	16.80	18.18
58				9.20	10.45	11.75	13.08	14.44	15.81	17.21	18.62
60				9.43	10.71	12.03	13.39	14.76	16.16	17.58	19.01



Dbh	Total Height of Tree in metres										
(cm)	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m
10											
12											
14											
16											
18											
20											
22											
24											
26											
28											
30											
32											
34											
36											
38			1.73	1.81	1.89	1.98	2.07	2.16	2.25	2.35	
40			2.30	2.49	2.69	2.90	3.12	3.36	3.60	3.85	
42			2.89	3.20	3.53	3.89	4.27	4.68	5.11	5.56	
44			3.49	3.92	4.39	4.91	5.46	6.05	6.67	7.33	
46			4.06	4.61	5.22	5.88	6.58	7.33	8.13	8.96	
48			4.59	5.25	5.97	6.75	7.58	8.46	9.37	10.32	11.31
50			5.07	5.82	6.64	7.51	8.44	9.41	10.41	11.45	12.52
52			5.50	6.33	7.23	8.18	9.17	10.21	11.29	12.40	13.53
54			5.89	6.79	7.74	8.75	9.81	10.91	12.04	13.20	14.38
56				7.19	8.20	9.26	10.37	11.51	12.69	13.89	15.11
58				7.55	8.60	9.71	10.86	12.04	13.25	14.49	15.75
60				7.87	8.97	10.11	11.29	12.51	13.76	15.03	16.32

Appendix B-1
Red Pine Sawlog and Pulp Volume Tables

M121

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Red Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0319	0.0003	0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0319	0	0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0319	0.0000	0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0319	0.0000	0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0319		0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.0319		0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Red Pine Sawlog and Pulp Volume Estimates

8 metre

Total Height - 8 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0319	0.0003	0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Total Height - 8 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0319	0	0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Total Height - 8 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0319	0.0000	0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Total Height - 8 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0319	0.0000	0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Total Height - 8 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0319		0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Total Height - 8 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0319		0.0277				2	0.0271	0.0023	5.66	2	0.0271	0.0023

Red Pine Sawlog and Pulp Volume Estimates

10 metre

Total Height - 10 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560	0.0302	0.0508	3.55	1	0.0243	1	0.0182	0.0100	7.63	2	0.0425	0.0100

Total Height - 10 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560		0.0508				2	0.0425	0.0100	7.63	2	0.0425	0.0100

Total Height - 10 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560		0.0508				2	0.0425	0.0100	7.63	2	0.0425	0.0100

Total Height - 10 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560		0.0508				2	0.0425	0.0100	7.63	2	0.0425	0.0100

Total Height - 10 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560		0.0508				2	0.0425	0.0100	7.63	2	0.0425	0.0100

Total Height - 10 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560		0.0508				2	0.0425	0.0100	7.63	2	0.0425	0.0100

Red Pine Sawlog and Pulp Volume Estimates

12 metre

Total Height - 12 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
12	0.0678	0.0384	0.0626	4.49	1	0.0245	2	0.0343	0.0057	9.25	3	0.0588	0.0057
14	0.0899	0.0669	0.0836	6.17	2	0.0602	1	0.0178	0.0073	9.61	3	0.0780	0.0073
16	0.1146	0.0935	0.1070	7.05	2	0.0774	1	0.0221	0.0090	9.87	3	0.0995	0.0090
18	0.1421	0.1213	0.1328	7.65	2	0.0966	1	0.0268	0.0107	10.07	3	0.1234	0.0107

Total Height - 12 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
12	0.0678		0.0626				3	0.0588	0.0057	9.25	3	0.0588	0.0057
14	0.0899		0.0836				3	0.0780	0.0073	9.61	3	0.0780	0.0073
16	0.1146	0.0141	0.1070	1.08			3	0.0995	0.0090	9.87	3	0.0995	0.0090
18	0.1421	0.0671	0.1328	3.52	1	0.0547	2	0.0687	0.0107	10.07	3	0.1234	0.0107

Total Height - 12 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
12	0.0678		0.0626				3	0.0588	0.0057	9.25	3	0.0588	0.0057
14	0.0899		0.0836				3	0.0780	0.0073	9.61	3	0.0780	0.0073
16	0.1146		0.1070				3	0.0995	0.0090	9.87	3	0.0995	0.0090
18	0.1421		0.1328				3	0.1234	0.0107	10.07	3	0.1234	0.0107

Total Height - 12 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
12	0.0678		0.0626				3	0.0588	0.0057	9.25	3	0.0588	0.0057
14	0.0899		0.0836				3	0.0780	0.0073	9.61	3	0.0780	0.0073
16	0.1146		0.1070				3	0.0995	0.0090	9.87	3	0.0995	0.0090
18	0.1421		0.1328				3	0.1234	0.0107	10.07	3	0.1234	0.0107

Total Height - 12 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
12	0.0678		0.0626				3	0.0588	0.0057	9.25	3	0.0588	0.0057
14	0.0899		0.0836				3	0.0780	0.0073	9.61	3	0.0780	0.0073
16	0.1146		0.1070				3	0.0995	0.0090	9.87	3	0.0995	0.0090
18	0.1421		0.1328				3	0.1234	0.0107	10.07	3	0.1234	0.0107

Red Pine Sawlog and Pulp Volume Estimates

Total Height - 10 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560	0.0302	0.0508	3.55	1	0.0243	1	0.0182	0.0100	7.63	2	0.0425	0.0100

Total Height - 10 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560		0.0508				2	0.0425	0.0100	7.63	2	0.0425	0.0100

Total Height - 10 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560		0.0508				2	0.0425	0.0100	7.63	2	0.0425	0.0100

Total Height - 10 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560		0.0508				2	0.0425	0.0100	7.63	2	0.0425	0.0100

Total Height - 10 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560		0.0508				2	0.0425	0.0100	7.63	2	0.0425	0.0100

Total Height - 10 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0399		0.0356				2	0.0302	0.0074	7.18	2	0.0302	0.0074
12	0.0560		0.0508				2	0.0425	0.0100	7.63	2	0.0425	0.0100

Red Pine Sawlog and Pulp Volume Estimates

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 9 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
12	0.0678	0.0384	0.0626	4.49	1	0.0245	2	0.0343	0.0057	9.25	3	0.0588	0.0057
14	0.0899	0.0669	0.0836	6.17	2	0.0602	1	0.0178	0.0073	9.61	3	0.0780	0.0073
16	0.1146	0.0935	0.1070	7.05	2	0.0774	1	0.0221	0.0090	9.87	3	0.0995	0.0090
18	0.1421	0.1213	0.1328	7.65	2	0.0966	1	0.0268	0.0107	10.07	3	0.1234	0.0107

Total Height - 12 m

Sawlog, Pulp & Unmerchantable Volume

Pulp & Unmerchantable Volume

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 9 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
12	0.0678		0.0626				3	0.0588	0.0057	9.25	3	0.0588	0.0057
14	0.0899		0.0836				3	0.0780	0.0073	9.61	3	0.0780	0.0073
16	0.1146	0.0146	0.1070	1.08			3	0.0995	0.0090	9.87	3	0.0995	0.0090
18	0.1421	0.0671	0.1328	3.52	1	0.0547	2	0.0687	0.0107	10.07	3	0.1234	0.0107

Total Height - 12 m

Sawlog, Pulp & Unmerchantable Volume

Pulp & Unmerchantable Volume

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 9 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
12	0.0678		0.0626				3	0.0588	0.0057	9.25	3	0.0588	0.0057
14	0.0899		0.0836				3	0.0780	0.0073	9.61	3	0.0780	0.0073
16	0.1146		0.1070				3	0.0995	0.0090	9.87	3	0.0995	0.0090
18	0.1421		0.1328				3	0.1234	0.0107	10.07	3	0.1234	0.0107

Total Height - 12 m

Sawlog, Pulp & Unmerchantable Volume

Pulp & Unmerchantable Volume

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 9 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
12	0.0678		0.0626				3	0.0588	0.0057	9.25	3	0.0588	0.0057
14	0.0899		0.0836				3	0.0780	0.0073	9.61	3	0.0780	0.0073
16	0.1146		0.1070				3	0.0995	0.0090	9.87	3	0.0995	0.0090
18	0.1421		0.1328				3	0.1234	0.0107	10.07	3	0.1234	0.0107

Total Height - 12 m

Sawlog, Pulp & Unmerchantable Volume

Pulp & Unmerchantable Volume

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 9 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
0.0678		0.0626				3	0.0588	0.0057	9.25	3	0.0588	0.0057
0.0899		0.0836				3	0.0780	0.0073	9.61	3	0.0780	0.0073
0.1146		0.1070				3	0.0995	0.0090	9.87	3	0.0995	0.0090
0.1421		0.1328				3	0.1234	0.0107	10.07	3	0.1234	0.0107

Red Pine Sawlog and Pulp Volume Estimates

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	[illegible]	[illegible]	[illegible]	[illegible]
10	0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
12	0.0678		0.0626				3	0.0588	0.0057	9.25	3	0.0588	0.0057
14	0.0899		0.0836				3	0.0780	0.0073	9.61	3	0.0780	0.0073
16	0.1146		0.1070				3	0.0995	0.0090	9.87	3	0.0995	0.0090
18	0.1421		0.1328				3	0.1234	0.0107	10.07	3	0.1234	0.0107

Red Pine Sawlog and Pulp Volume Estimates

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804	0.0478	0.0750	5.54	2	0.0466	2	0.0275	0.0032	10.90	4	0.0740	0.0032
14	0.1062	0.0810	0.0999	7.41	2	0.0623	2	0.0354	0.0040	11.30	4	0.0978	0.0040
16	0.1351	0.1123	0.1275	8.40	3	0.1083	1	0.0160	0.0049	11.59	4	0.1243	0.0049
18	0.1670	0.1448	0.1579	9.06	3	0.1343	1	0.0192	0.0059	11.81	4	0.1535	0.0059
20	0.2018	0.1794	0.1908	9.56	3	0.1627	1	0.0227	0.0069	12.00	4	0.1853	0.0069
22	0.2396	0.2161	0.2264	9.94	3	0.1935	1	0.0263	0.0079	12.14	4	0.2198	0.0079
24	0.2802	0.2552	0.2646	10.25	3	0.2267	1	0.0301	0.0090	12.27	4	0.2568	0.0090
26	0.3236	0.2967	0.3053	10.51	4	0.2962	0	0.0000	0.0102	12.38	4	0.2962	0.0102
28	0.3699	0.3405	0.3486	10.73	4	0.3382	0	0.0000	0.0114	12.47	4	0.3382	0.0114

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804		0.0750				4	0.0740	0.0032	10.90	4	0.0740	0.0032
14	0.1062		0.0999				4	0.0978	0.0040	11.30	4	0.0978	0.0040
16	0.1351	0.0134	0.1275				4	0.1243	0.0049	11.59	4	0.1243	0.0049
18	0.1670	0.0818	0.1579	4.29	1	0.0548	3	0.0987	0.0059	11.81	4	0.1535	0.0059
20	0.2018	0.1334	0.1908	5.99	2	0.1221	2	0.0632	0.0069	12.00	4	0.1853	0.0069
22	0.2396	0.1784	0.2264	6.98	2	0.1461	2	0.0736	0.0079	12.14	4	0.2198	0.0079
24	0.2802	0.2226	0.2646	7.66	2	0.1721	2	0.0846	0.0090	12.27	4	0.2568	0.0090
26	0.3236	0.2677	0.3053	8.22	3	0.2622	1	0.0341	0.0102	12.38	4	0.2962	0.0102
28	0.3699	0.3143	0.3486	8.65	3	0.3000	1	0.0382	0.0114	12.47	4	0.3382	0.0114

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804		0.0750				4	0.0740	0.0032	10.90	4	0.0740	0.0032
14	0.1062		0.0999				4	0.0978	0.0040	11.30	4	0.0978	0.0040
16	0.1351		0.1275				4	0.1243	0.0049	11.59	4	0.1243	0.0049
18	0.1670		0.1579				4	0.1535	0.0059	11.81	4	0.1535	0.0059
20	0.2018		0.1908				4	0.1853	0.0069	12.00	4	0.1853	0.0069
22	0.2396	0.0455	0.2264				4	0.2198	0.0079	12.14	4	0.2198	0.0079
24	0.2802	0.1166	0.2646	3.45	1	0.0970	3	0.1598	0.0090	12.27	4	0.2568	0.0090
26	0.3236	0.1846	0.3053	4.87	1	0.1137	3	0.1825	0.0102	12.38	4	0.2962	0.0102
28	0.3699	0.2449	0.3486	5.84	2	0.2300	2	0.1083	0.0114	12.47	4	0.3382	0.0114

Red Pine Sawlog and Pulp Volume Estimates

12 metre

Total Height - **12 m** **Sawlog Upper Diameter -** **35 cm** **Stump height -** **0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	5 cm upper bark	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0486		0.0440				3	0.0421	0.0043	8.74	3	0.0421	0.0043
12	0.0678		0.0626				3	0.0588	0.0057	9.25	3	0.0588	0.0057
14	0.0899		0.0836				3	0.0780	0.0073	9.61	3	0.0780	0.0073
16	0.1146		0.1070				3	0.0995	0.0090	9.87	3	0.0995	0.0090
18	0.1421		0.1328				3	0.1234	0.0107	10.07	3	0.1234	0.0107

Red Pine Sawlog and Pulp Volume Estimates

14 metre

Total Height - 14 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804	0.0478	0.0750	5.54	2	0.0466	2	0.0275	0.0032	10.90	4	0.0740	0.0032
14	0.1062	0.0810	0.0999	7.41	2	0.0823	2	0.0354	0.0040	11.30	4	0.0978	0.0040
16	0.1351	0.1123	0.1275	8.40	3	0.1083	1	0.0160	0.0049	11.59	4	0.1243	0.0049
18	0.1670	0.1448	0.1579	9.06	3	0.1343	1	0.0192	0.0059	11.81	4	0.1535	0.0059
20	0.2018	0.1794	0.1908	9.56	3	0.1627	1	0.0227	0.0069	12.00	4	0.1853	0.0069
22	0.2396	0.2161	0.2264	9.94	3	0.1935	1	0.0263	0.0079	12.14	4	0.2198	0.0079
24	0.2802	0.2552	0.2646	10.25	3	0.2267	1	0.0301	0.0090	12.27	4	0.2568	0.0090
26	0.3236	0.2967	0.3053	10.51	4	0.2962	0	0.0000	0.0102	12.38	4	0.2962	0.0102
28	0.3699	0.3405	0.3486	10.73	4	0.3382	0	0.0000	0.0114	12.47	4	0.3382	0.0114

Total Height - 14 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804		0.0750				4	0.0740	0.0032	10.90	4	0.0740	0.0032
14	0.1062		0.0999				4	0.0978	0.0040	11.30	4	0.0978	0.0040
16	0.1351	0.0134	0.1275				4	0.1243	0.0049	11.59	4	0.1243	0.0049
18	0.1670	0.0818	0.1579	4.29	1	0.0544	3	0.0987	0.0059	11.81	4	0.1535	0.0059
20	0.2018	0.1334	0.1908	5.99	2	0.1221	2	0.0632	0.0069	12.00	4	0.1853	0.0069
22	0.2396	0.1784	0.2264	6.98	2	0.1461	2	0.0736	0.0079	12.14	4	0.2198	0.0079
24	0.2802	0.2226	0.2646	7.68	2	0.1721	2	0.0846	0.0090	12.27	4	0.2568	0.0090
26	0.3236	0.2677	0.3053	8.22	3	0.2622	1	0.0341	0.0102	12.38	4	0.2962	0.0102
28	0.3699	0.3143	0.3486	8.65	3	0.3000	1	0.0382	0.0114	12.47	4	0.3382	0.0114

Total Height - 14 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804		0.0750				4	0.0740	0.0032	10.90	4	0.0740	0.0032
14	0.1062		0.0999				4	0.0978	0.0040	11.30	4	0.0978	0.0040
16	0.1351		0.1275				4	0.1243	0.0049	11.59	4	0.1243	0.0049
18	0.1670		0.1579				4	0.1535	0.0059	11.81	4	0.1535	0.0059
20	0.2018		0.1908				4	0.1853	0.0069	12.00	4	0.1853	0.0069
22	0.2396	0.0455	0.2264				4	0.2198	0.0079	12.14	4	0.2198	0.0079
24	0.2802	0.1166	0.2646	3.45	1	0.0970	3	0.1598	0.0090	12.27	4	0.2568	0.0090
26	0.3236	0.1846	0.3053	4.87	1	0.1137	3	0.1825	0.0102	12.38	4	0.2962	0.0102
28	0.3699	0.2449	0.3486	5.84	2	0.2300	2	0.1083	0.0114	12.47	4	0.3382	0.0114

Red Pine Sawlog and Pulp Volume Estimates

14 metre

Total Height - 14 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804		0.0750				4	0.0740	0.0032	10.90	4	0.0740	0.0032
14	0.1062		0.0999				4	0.0978	0.0040	11.30	4	0.0978	0.0040
16	0.1351		0.1275				4	0.1243	0.0049	11.59	4	0.1243	0.0049
18	0.1670		0.1579				4	0.1535	0.0059	11.81	4	0.1535	0.0059
20	0.2018		0.1908				4	0.1853	0.0069	12.00	4	0.1853	0.0069
22	0.2396		0.2264				4	0.2198	0.0079	12.14	4	0.2198	0.0079
24	0.2802		0.2646				4	0.2568	0.0090	12.27	4	0.2568	0.0090
26	0.3236	0.0282	0.3053				4	0.2962	0.0102	12.38	4	0.2962	0.0102
28	0.3699	0.0843	0.3486				4	0.3382	0.0114	12.47	4	0.3382	0.0114

Total Height - 14 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804		0.0750				4	0.0740	0.0032	10.90	4	0.0740	0.0032
14	0.1062		0.0999				4	0.0978	0.0040	11.30	4	0.0978	0.0040
16	0.1351		0.1275				4	0.1243	0.0049	11.59	4	0.1243	0.0049
18	0.1670		0.1579				4	0.1535	0.0059	11.81	4	0.1535	0.0059
20	0.2018		0.1908				4	0.1853	0.0069	12.00	4	0.1853	0.0069
22	0.2396		0.2264				4	0.2198	0.0079	12.14	4	0.2198	0.0079
24	0.2802		0.2646				4	0.2568	0.0090	12.27	4	0.2568	0.0090
26	0.3236		0.3053				4	0.2962	0.0102	12.38	4	0.2962	0.0102
28	0.3699		0.3486				4	0.3382	0.0114	12.47	4	0.3382	0.0114

Total Height - 14 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804		0.0750				4	0.0740	0.0032	10.90	4	0.0740	0.0032
14	0.1062		0.0999				4	0.0978	0.0040	11.30	4	0.0978	0.0040
16	0.1351		0.1275				4	0.1243	0.0049	11.59	4	0.1243	0.0049
18	0.1670		0.1579				4	0.1535	0.0059	11.81	4	0.1535	0.0059
20	0.2018		0.1908				4	0.1853	0.0069	12.00	4	0.1853	0.0069
22	0.2396		0.2264				4	0.2198	0.0079	12.14	4	0.2198	0.0079
24	0.2802		0.2646				4	0.2568	0.0090	12.27	4	0.2568	0.0090
26	0.3236		0.3053				4	0.2962	0.0102	12.38	4	0.2962	0.0102
28	0.3699		0.3486				4	0.3382	0.0114	12.47	4	0.3382	0.0114

Red Pine Sawlog and Pulp Volume Estimates

16 metre

Total Height - 16 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0935	0.0582	0.0880	6.67	2	0.0475	2	0.0340	0.0089	12.56	4	0.0815	0.0089
14	0.1234	0.0961	0.1170	8.70	3	0.0896	2	0.0274	0.0021	13.00	5	0.1170	0.0021
16	0.1567	0.1322	0.1491	9.79	3	0.1146	2	0.0339	0.0026	13.32	5	0.1484	0.0026
18	0.1934	0.1699	0.1843	10.52	4	0.1694	1	0.0135	0.0030	13.57	5	0.1829	0.0030
20	0.2333	0.2097	0.2224	11.06	4	0.2045	1	0.0159	0.0036	13.77	5	0.2204	0.0036
22	0.2763	0.2520	0.2635	11.48	4	0.2424	1	0.0184	0.0041	13.93	5	0.2608	0.0041
24	0.3225	0.2969	0.3074	11.83	4	0.2831	1	0.0210	0.0047	14.07	5	0.3041	0.0047
26	0.3717	0.3444	0.3541	12.11	4	0.3264	1	0.0236	0.0052	14.19	5	0.3501	0.0052
28	0.4240	0.3945	0.4036	12.35	4	0.3724	1	0.0264	0.0058	14.29	5	0.3989	0.0058
30	0.4793	0.4473	0.4558	12.56	4	0.4211	1	0.0293	0.0065	14.38	5	0.4504	0.0065
32	0.5376	0.5027	0.5106	12.74	4	0.4723	1	0.0323	0.0071	14.46	5	0.5046	0.0071
34	0.5989	0.5607	0.5682	12.90	4	0.5260	1	0.0354	0.0078	14.53	5	0.5614	0.0078
36	0.6631	0.6213	0.6284	13.04	5	0.6209	0	0.0000	0.0085	14.59	5	0.6209	0.0085
38	0.7303	0.6845	0.6913	13.17	5	0.6831	0	0.0000	0.0092	14.65	5	0.6831	0.0092
40	0.8004	0.7503	0.7568	13.29	5	0.7478	0	0.0000	0.0099	14.70	5	0.7478	0.0099
42	0.8735	0.8186	0.8249	13.39	5	0.8151	0	0.0000	0.0106	14.75	5	0.8151	0.0106
44	0.9495	0.8896	0.8956	13.49	5	0.8851	0	0.0000	0.0114	14.79	5	0.8851	0.0114
46	1.0284	0.9631	0.9689	13.58	5	0.9576	0	0.0000	0.0122	14.83	5	0.9576	0.0122

Total Height - 16 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 10 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0935		0.0880				4	0.0815	0.0089	12.56	4	0.0815	0.0089
14	0.1234		0.1170				5	0.1170	0.0021	13.00	5	0.1170	0.0021
16	0.1567	0.0121	0.1491				5	0.1484	0.0026	13.32	5	0.1484	0.0026
18	0.1934	0.0994	0.1843	5.20	1	0.0549	4	0.1280	0.0030	13.57	5	0.1829	0.0030
20	0.2333	0.1586	0.2224	7.10	2	0.1253	3	0.0951	0.0036	13.77	5	0.2204	0.0036
22	0.2763	0.2100	0.2635	8.19	3	0.2051	2	0.0558	0.0041	13.93	5	0.2608	0.0041
24	0.3225	0.2606	0.3074	8.97	3	0.2403	2	0.0638	0.0047	14.07	5	0.3041	0.0047
26	0.3717	0.3121	0.3541	9.56	3	0.2779	2	0.0722	0.0052	14.19	5	0.3501	0.0052
28	0.4240	0.3653	0.4036	10.03	3	0.3180	2	0.0809	0.0058	14.29	5	0.3989	0.0058
30	0.4793	0.4204	0.4558	10.42	3	0.3604	2	0.0900	0.0065	14.38	5	0.4504	0.0065
32	0.5376	0.4777	0.5106	10.76	4	0.4723	1	0.0323	0.0071	14.46	5	0.5046	0.0071
34	0.5989	0.5374	0.5682	11.04	4	0.5260	1	0.0354	0.0078	14.53	5	0.5614	0.0078
36	0.6631	0.5993	0.6284	11.29	4	0.5824	1	0.0386	0.0085	14.59	5	0.6209	0.0085
38	0.7303	0.6638	0.6913	11.52	4	0.6412	1	0.0419	0.0092	14.65	5	0.6831	0.0092
40	0.8004	0.7306	0.7568	11.72	4	0.7026	1	0.0452	0.0099	14.70	5	0.7478	0.0099
42	0.8735	0.7999	0.8249	11.90	4	0.7665	1	0.0487	0.0106	14.75	5	0.8151	0.0106
44	0.9495	0.8717	0.8956	12.06	4	0.8328	1	0.0522	0.0114	14.79	5	0.8851	0.0114
46	1.0284	0.9460	0.9689	12.21	4	0.9017	1	0.0559	0.0122	14.83	5	0.9576	0.0122

Red Pine Sawlog and Pulp Volume Estimates

Total Height - 14 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 9 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
										Pulp & Unmerchantable Volume			
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804		0.0750				4	0.0740	0.0032	10.90	4	0.0740	0.0032
14	0.1062		0.0999				4	0.0978	0.0040	11.30	4	0.0978	0.0040
16	0.1351		0.1275				4	0.1243	0.0049	11.59	4	0.1243	0.0049
18	0.1670		0.1579				4	0.1535	0.0059	11.81	4	0.1535	0.0059
20	0.2018		0.1908				4	0.1853	0.0069	12.00	4	0.1853	0.0069
22	0.2396		0.2264				4	0.2198	0.0079	12.14	4	0.2198	0.0079
24	0.2802		0.2646				4	0.2568	0.0090	12.27	4	0.2568	0.0090
26	0.3236	0.0282	0.3053				4	0.2962	0.0102	12.38	4	0.2962	0.0102
28	0.3699	0.0843	0.3486				4	0.3382	0.0114	12.47	4	0.3382	0.0114

Total Height - 14 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 9 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
										Pulp & Unmerchantable Volume			
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804		0.0750				4	0.0740	0.0032	10.90	4	0.0740	0.0032
14	0.1062		0.0999				4	0.0978	0.0040	11.30	4	0.0978	0.0040
16	0.1351		0.1275				4	0.1243	0.0049	11.59	4	0.1243	0.0049
18	0.1670		0.1579				4	0.1535	0.0059	11.81	4	0.1535	0.0059
20	0.2018		0.1908				4	0.1853	0.0069	12.00	4	0.1853	0.0069
22	0.2396		0.2264				4	0.2198	0.0079	12.14	4	0.2198	0.0079
24	0.2802		0.2646				4	0.2568	0.0090	12.27	4	0.2568	0.0090
26	0.3236		0.3053				4	0.2962	0.0102	12.38	4	0.2962	0.0102
28	0.3699		0.3486				4	0.3382	0.0114	12.47	4	0.3382	0.0114

Total Height - 14 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 9 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
										Pulp & Unmerchantable Volume			
10	0.0578		0.0529				3	0.0457	0.0099	10.32	3	0.0457	0.0099
12	0.0804		0.0750				4	0.0740	0.0032	10.90	4	0.0740	0.0032
14	0.1062		0.0999				4	0.0978	0.0040	11.30	4	0.0978	0.0040
16	0.1351		0.1275				4	0.1243	0.0049	11.59	4	0.1243	0.0049
18	0.1670		0.1579				4	0.1535	0.0059	11.81	4	0.1535	0.0059
20	0.2018		0.1908				4	0.1853	0.0069	12.00	4	0.1853	0.0069
22	0.2396		0.2264				4	0.2198	0.0079	12.14	4	0.2198	0.0079
24	0.2802		0.2646				4	0.2568	0.0090	12.27	4	0.2568	0.0090
26	0.3236		0.3053				4	0.2962	0.0102	12.38	4	0.2962	0.0102
28	0.3699		0.3486				4	0.3382	0.0114	12.47	4	0.3382	0.0114

Red Pine Sawlog and Pulp Volume Estimates

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0935	0.0582	0.0880	6.67	2	0.0475	2	0.0340	0.0089	12.56	4	0.0815	0.0089
11	0.1234	0.0861	0.1170	8.70	3	0.0696	2	0.0274	0.0021	13.00	5	0.1170	0.0021
12	0.1567	0.1322	0.1491	9.79	3	0.1146	2	0.0339	0.0026	13.32	5	0.1484	0.0026
13	0.1934	0.1699	0.1843	10.52	4	0.1694	1	0.0135	0.0030	13.57	5	0.1829	0.0030
14	0.2333	0.2097	0.2224	11.06	4	0.2045	1	0.0159	0.0036	13.77	5	0.2204	0.0036
15	0.2763	0.2520	0.2635	11.48	4	0.2424	1	0.0184	0.0041	13.93	5	0.2608	0.0041
16	0.3225	0.2969	0.3074	11.83	4	0.2831	1	0.0210	0.0047	14.07	5	0.3041	0.0047
17	0.3717	0.3444	0.3541	12.11	4	0.3264	1	0.0236	0.0052	14.19	5	0.3501	0.0052
18	0.4240	0.3945	0.4036	12.35	4	0.3724	1	0.0264	0.0058	14.29	5	0.3989	0.0058
19	0.4793	0.4473	0.4558	12.56	4	0.4211	1	0.0293	0.0065	14.38	5	0.4504	0.0065
20	0.5376	0.5027	0.5106	12.74	4	0.4723	1	0.0323	0.0071	14.46	5	0.5046	0.0071
21	0.5989	0.5607	0.5682	12.90	4	0.5260	1	0.0354	0.0078	14.53	5	0.5614	0.0078
22	0.6631	0.6213	0.6284	13.04	5	0.6209	0	0.0000	0.0085	14.59	5	0.6209	0.0085
23	0.7303	0.6845	0.6913	13.17	5	0.6831	0	0.0000	0.0092	14.65	5	0.6831	0.0092
24	0.8004	0.7503	0.7568	13.29	5	0.7478	0	0.0000	0.0099	14.70	5	0.7478	0.0099
25	0.8735	0.8186	0.8249	13.39	5	0.8151	0	0.0000	0.0106	14.75	5	0.8151	0.0106
26	0.9495	0.8896	0.8956	13.49	5	0.8851	0	0.0000	0.0114	14.79	5	0.8851	0.0114
27	1.0284	0.9631	0.9689	13.58	5	0.9576	0	0.0000	0.0122	14.83	5	0.9576	0.0122

Total Height - 16 m | **Stump Height - 0.3 m**

Sawlog, Pulp & Unmerchantable Volume | Pulp & Unmerchantable Volume

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.0935		0.0880				4	0.0815	0.0089	12.56	4	0.0815	0.0089
11	0.1234		0.1170				5	0.1170	0.0021	13.00	5	0.1170	0.0021
12	0.1567	0.0121	0.1491				5	0.1484	0.0026	13.32	5	0.1484	0.0026
13	0.1934	0.0994	0.1843	5.20	1	0.0549	4	0.1280	0.0030	13.57	5	0.1829	0.0030
14	0.2333	0.1586	0.2224	7.10	2	0.1253	3	0.0951	0.0036	13.77	5	0.2204	0.0036
15	0.2763	0.2100	0.2635	8.19	3	0.2051	2	0.0558	0.0041	13.93	5	0.2608	0.0041
16	0.3225	0.2606	0.3074	8.97	3	0.2403	2	0.0638	0.0047	14.07	5	0.3041	0.0047
17	0.3717	0.3121	0.3541	9.56	3	0.2779	2	0.0722	0.0052	14.19	5	0.3501	0.0052
18	0.4240	0.3653	0.4036	10.03	3	0.3180	2	0.0809	0.0058	14.29	5	0.3989	0.0058
19	0.4793	0.4204	0.4558	10.42	3	0.3604	2	0.0900	0.0065	14.38	5	0.4504	0.0065
20	0.5376	0.4777	0.5106	10.76	4	0.4723	1	0.0323	0.0071	14.46	5	0.5046	0.0071
21	0.5989	0.5374	0.5682	11.04	4	0.5260	1	0.0354	0.0078	14.53	5	0.5614	0.0078
22	0.6631	0.5993	0.6284	11.29	4	0.5824	1	0.0386	0.0085	14.59	5	0.6209	0.0085
23	0.7303	0.6638	0.6913	11.52	4	0.6412	1	0.0419	0.0092	14.65	5	0.6831	0.0092
24	0.8004	0.7306	0.7568	11.72	4	0.7026	1	0.0452	0.0099	14.70	5	0.7478	0.0099
25	0.8735	0.7999	0.8249	11.90	4	0.7665	1	0.0487	0.0106	14.75	5	0.8151	0.0106
26	0.9495	0.8717	0.8956	12.06	4	0.8328	1	0.0522	0.0114	14.79	5	0.8851	0.0114
27	1.0284	0.9460	0.9689	12.21	4	0.9017	1	0.0559	0.0122	14.83	5	0.9576	0.0122

Red Pine Sawlog and Pulp Volume Estimates

Total Height - 16 m													
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0935		0.0880				4	0.0815	0.0089	12.56	4	0.0815	0.0089
14	0.1234		0.1170				5	0.1170	0.0021	13.00	5	0.1170	0.0021
16	0.1567		0.1491				5	0.1484	0.0026	13.32	5	0.1484	0.0026
18	0.1934		0.1843				5	0.1829	0.0030	13.57	5	0.1829	0.0030
20	0.2333		0.2224				5	0.2204	0.0036	13.77	5	0.2204	0.0036
22	0.2763	0.0476	0.2635				5	0.2608	0.0041	13.93	5	0.2608	0.0041
24	0.3225	0.1376	0.3074	4.07	1	0.0972	4	0.2069	0.0047	14.07	5	0.3041	0.0047
26	0.3717	0.2181	0.3541	5.77	2	0.2055	3	0.1446	0.0052	14.19	5	0.3501	0.0052
28	0.4240	0.2872	0.4036	6.87	2	0.2362	3	0.1627	0.0058	14.29	5	0.3989	0.0058
30	0.4793	0.3526	0.4558	7.67	2	0.2690	3	0.1814	0.0065	14.38	5	0.4504	0.0065
32	0.5376	0.4173	0.5106	8.29	3	0.4052	2	0.0993	0.0071	14.46	5	0.5046	0.0071
34	0.5989	0.4824	0.5682	8.80	3	0.4524	2	0.1090	0.0078	14.53	5	0.5614	0.0078
36	0.6631	0.5488	0.6284	9.23	3	0.5019	2	0.1190	0.0085	14.59	5	0.6209	0.0085
38	0.7303	0.6168	0.6913	9.60	3	0.5537	2	0.1293	0.0092	14.65	5	0.6831	0.0092
40	0.8004	0.6867	0.7568	9.92	3	0.6079	2	0.1400	0.0099	14.70	5	0.7478	0.0099
42	0.8735	0.7585	0.8249	10.20	3	0.6643	2	0.1509	0.0106	14.75	5	0.8151	0.0106
44	0.9495	0.8326	0.8956	10.45	3	0.7230	2	0.1621	0.0114	14.79	5	0.8851	0.0114
46	1.0284	0.9088	0.9689	10.68	4	0.9017	1	0.0559	0.0122	14.83	5	0.9576	0.0122

Total Height - 18 m													
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0935		0.0880				4	0.0815	0.0089	12.56	4	0.0815	0.0089
14	0.1234		0.1170				5	0.1170	0.0021	13.00	5	0.1170	0.0021
16	0.1567		0.1491				5	0.1484	0.0026	13.32	5	0.1484	0.0026
18	0.1934		0.1843				5	0.1829	0.0030	13.57	5	0.1829	0.0030
20	0.2333		0.2224				5	0.2204	0.0036	13.77	5	0.2204	0.0036
22	0.2763		0.2635				5	0.2608	0.0041	13.93	5	0.2608	0.0041
24	0.3225		0.3074				5	0.3041	0.0047	14.07	5	0.3041	0.0047
26	0.3717	0.0231	0.3541				5	0.3501	0.0052	14.19	5	0.3501	0.0052
28	0.4240	0.0893	0.4036				5	0.3989	0.0058	14.29	5	0.3989	0.0058
30	0.4793	0.1786	0.4558	3.38	1	0.1513	4	0.2991	0.0065	14.38	5	0.4504	0.0065
32	0.5376	0.2723	0.5106	4.72	1	0.1720	4	0.3326	0.0071	14.46	5	0.5046	0.0071
34	0.5989	0.3591	0.5682	5.75	2	0.3404	3	0.2211	0.0078	14.53	5	0.5614	0.0078
36	0.6631	0.4406	0.6284	6.55	2	0.3790	3	0.2419	0.0085	14.59	5	0.6209	0.0085
38	0.7303	0.5200	0.6913	7.20	2	0.4196	3	0.2635	0.0092	14.65	5	0.6831	0.0092
40	0.8004	0.5986	0.7568	7.73	2	0.4621	3	0.2857	0.0099	14.70	5	0.7478	0.0099
42	0.8735	0.6774	0.8249	8.18	3	0.6643	2	0.1509	0.0106	14.75	5	0.8151	0.0106
44	0.9495	0.7571	0.8956	8.57	3	0.7230	2	0.1621	0.0114	14.79	5	0.8851	0.0114
46	1.0284	0.8381	0.9689	8.92	3	0.7840	2	0.1736	0.0122	14.83	5	0.9576	0.0122

Red Pine Sawlog and Pulp Volume Estimates

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.0935		0.0680				4	0.0815	0.0089	12.56	4	0.0815	0.0089
	0.1234		0.1170				5	0.1170	0.0021	13.00	5	0.1170	0.0021
	0.1567		0.1491				5	0.1484	0.0026	13.32	5	0.1484	0.0026
	0.1934		0.1843				5	0.1829	0.0030	13.57	5	0.1829	0.0030
	0.2333		0.2224				5	0.2204	0.0036	13.77	5	0.2204	0.0036
	0.2763		0.2635				5	0.2608	0.0041	13.93	5	0.2608	0.0041
	0.3225		0.3074				5	0.3041	0.0047	14.07	5	0.3041	0.0047
	0.3717		0.3541				5	0.3501	0.0052	14.19	5	0.3501	0.0052
	0.4240		0.4036				5	0.3989	0.0058	14.29	5	0.3989	0.0058
	0.4793	0.0070	0.4558				5	0.4504	0.0065	14.38	5	0.4504	0.0065
	0.5376	0.0643	0.5106				5	0.5046	0.0071	14.46	5	0.5046	0.0071
	0.5989	0.1373	0.5682				5	0.5614	0.0078	14.53	5	0.5614	0.0078
	0.6631	0.2269	0.6284	2.97	1	0.2174	4	0.4035	0.0085	14.59	5	0.6209	0.0085
	0.7303	0.3261	0.6913	3.96	1	0.2421	4	0.4410	0.0092	14.65	5	0.6831	0.0092
	0.8004	0.4260	0.7568	4.85	1	0.2681	4	0.4797	0.0099	14.70	5	0.7478	0.0099
	0.8735	0.5230	0.8249	5.61	2	0.5066	3	0.3086	0.0106	14.75	5	0.8151	0.0106
	0.9495	0.6173	0.8956	6.24	2	0.5530	3	0.3321	0.0114	14.79	5	0.8851	0.0114
	1.0284	0.7102	0.9689	6.78	2	0.6013	3	0.3563	0.0122	14.83	5	0.9576	0.0122

Total Height - 18 m

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	0.0935		0.0680				4	0.0815	0.0089	12.56	4	0.0815	0.0089
	0.1234		0.1170				5	0.1170	0.0021	13.00	5	0.1170	0.0021
	0.1567		0.1491				5	0.1484	0.0026	13.32	5	0.1484	0.0026
	0.1934		0.1843				5	0.1829	0.0030	13.57	5	0.1829	0.0030
	0.2333		0.2224				5	0.2204	0.0036	13.77	5	0.2204	0.0036
	0.2763		0.2635				5	0.2608	0.0041	13.93	5	0.2608	0.0041
	0.3225		0.3074				5	0.3041	0.0047	14.07	5	0.3041	0.0047
	0.3717		0.3541				5	0.3501	0.0052	14.19	5	0.3501	0.0052
	0.4240		0.4036				5	0.3989	0.0058	14.29	5	0.3989	0.0058
	0.4793		0.4558				5	0.4504	0.0065	14.38	5	0.4504	0.0065
	0.5376		0.5106				5	0.5046	0.0071	14.46	5	0.5046	0.0071
	0.5989		0.5682				5	0.5614	0.0078	14.53	5	0.5614	0.0078
	0.6631	0.0490	0.6284				5	0.6209	0.0085	14.59	5	0.6209	0.0085
	0.7303	0.1141	0.6913				5	0.6831	0.0092	14.65	5	0.6831	0.0092
	0.8004	0.1922	0.7568				5	0.7478	0.0099	14.70	5	0.7478	0.0099
	0.8735	0.2836	0.8249				5	0.8151	0.0106	14.75	5	0.8151	0.0106
	0.9495	0.3854	0.8956	3.45	1	0.3242	4	0.5609	0.0114	14.79	5	0.8851	0.0114
	1.0284	0.4927	0.9689	4.18	1	0.3542	4	0.6034	0.0122	14.83	5	0.9576	0.0122

Red Pine Sawlog and Pulp Volume Estimates

16 metre

Total Height - 16 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0935		0.0880				4	0.0815	0.0089	12.56	4	0.0815	0.0089
14	0.1234		0.1170				5	0.1170	0.0021	13.00	5	0.1170	0.0021
16	0.1567		0.1491				5	0.1484	0.0026	13.32	5	0.1484	0.0026
18	0.1934		0.1843				5	0.1829	0.0030	13.57	5	0.1829	0.0030
20	0.2333		0.2224				5	0.2204	0.0036	13.77	5	0.2204	0.0036
22	0.2763	0.0476	0.2635				5	0.2608	0.0041	13.93	5	0.2608	0.0041
24	0.3225	0.1376	0.3074	4.07	1	0.0972	4	0.2069	0.0047	14.07	5	0.3041	0.0047
26	0.3717	0.2181	0.3541	5.77	2	0.2055	3	0.1446	0.0052	14.19	5	0.3501	0.0052
28	0.4240	0.2872	0.4036	6.87	2	0.2362	3	0.1627	0.0058	14.29	5	0.3989	0.0058
30	0.4793	0.3526	0.4558	7.67	2	0.2690	3	0.1814	0.0065	14.38	5	0.4504	0.0065
32	0.5376	0.4173	0.5106	8.29	3	0.4052	2	0.0993	0.0071	14.46	5	0.5046	0.0071
34	0.5989	0.4824	0.5682	8.80	3	0.4524	2	0.1090	0.0078	14.53	5	0.5614	0.0078
36	0.6631	0.5488	0.6284	9.23	3	0.5019	2	0.1190	0.0085	14.59	5	0.6209	0.0085
38	0.7303	0.6168	0.6913	9.60	3	0.5537	2	0.1293	0.0092	14.65	5	0.6831	0.0092
40	0.8004	0.6867	0.7568	9.92	3	0.6079	2	0.1400	0.0099	14.70	5	0.7478	0.0099
42	0.8735	0.7585	0.8249	10.20	3	0.6643	2	0.1509	0.0106	14.75	5	0.8151	0.0106
44	0.9495	0.8326	0.8956	10.45	3	0.7230	2	0.1621	0.0114	14.79	5	0.8851	0.0114
46	1.0284	0.9088	0.9689	10.68	4	0.9017	1	0.0559	0.0122	14.83	5	0.9576	0.0122

Total Height - 16 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0935		0.0880				4	0.0815	0.0089	12.56	4	0.0815	0.0089
14	0.1234		0.1170				5	0.1170	0.0021	13.00	5	0.1170	0.0021
16	0.1567		0.1491				5	0.1484	0.0026	13.32	5	0.1484	0.0026
18	0.1934		0.1843				5	0.1829	0.0030	13.57	5	0.1829	0.0030
20	0.2333		0.2224				5	0.2204	0.0036	13.77	5	0.2204	0.0036
22	0.2763		0.2635				5	0.2608	0.0041	13.93	5	0.2608	0.0041
24	0.3225		0.3074				5	0.3041	0.0047	14.07	5	0.3041	0.0047
26	0.3717	0.0231	0.3541				5	0.3501	0.0052	14.19	5	0.3501	0.0052
28	0.4240	0.0893	0.4036				5	0.3989	0.0058	14.29	5	0.3989	0.0058
30	0.4793	0.1786	0.4558	3.38	1	0.1513	4	0.2991	0.0065	14.38	5	0.4504	0.0065
32	0.5376	0.2723	0.5106	4.72	1	0.1720	4	0.3326	0.0071	14.46	5	0.5046	0.0071
34	0.5989	0.3591	0.5682	5.75	2	0.3404	3	0.2211	0.0078	14.53	5	0.5614	0.0078
36	0.6631	0.4408	0.6284	6.55	2	0.3790	3	0.2419	0.0085	14.59	5	0.6209	0.0085
38	0.7303	0.5200	0.6913	7.20	2	0.4196	3	0.2635	0.0092	14.65	5	0.6831	0.0092
40	0.8004	0.5986	0.7568	7.73	2	0.4621	3	0.2857	0.0099	14.70	5	0.7478	0.0099
42	0.8735	0.6774	0.8249	8.18	3	0.6643	2	0.1509	0.0106	14.75	5	0.8151	0.0106
44	0.9495	0.7571	0.8956	8.57	3	0.7230	2	0.1621	0.0114	14.79	5	0.8851	0.0114
46	1.0284	0.8381	0.9689	8.92	3	0.7840	2	0.1736	0.0122	14.83	5	0.9576	0.0122

Red Pine Sawlog and Pulp Volume Estimates

16 metre

Total Height - 16 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

			Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) [illegible] (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0935	0.0880				4	0.0815	0.0089	12.56	4	0.0815	0.0089
14	0.1234	0.1170				5	0.1170	0.0021	13.00	5	0.1170	0.0021
16	0.1567	0.1491				5	0.1484	0.0026	13.32	5	0.1484	0.0026
18	0.1934	0.1843				5	0.1829	0.0030	13.57	5	0.1829	0.0030
20	0.2333	0.2224				5	0.2204	0.0036	13.77	5	0.2204	0.0036
22	0.2763	0.2635				5	0.2608	0.0041	13.93	5	0.2608	0.0041
24	0.3225	0.3074				5	0.3041	0.0047	14.07	5	0.3041	0.0047
26	0.3717	0.3541				5	0.3501	0.0052	14.19	5	0.3501	0.0052
28	0.4240	0.4036				5	0.3989	0.0058	14.29	5	0.3989	0.0058
30	0.4793	0.0079 0.4558				5	0.4504	0.0065	14.38	5	0.4504	0.0065
32	0.5376	0.0643 0.5106				5	0.5046	0.0071	14.46	5	0.5046	0.0071
34	0.5989	0.1373 0.5682				5	0.5614	0.0078	14.53	5	0.5614	0.0078
36	0.6631	0.2269 0.6284	2.97	1	0.2174	4	0.4035	0.0085	14.59	5	0.6209	0.0085
38	0.7303	0.3261 0.6913	3.96	1	0.2421	4	0.4410	0.0092	14.65	5	0.6831	0.0092
40	0.8004	0.4260 0.7568	4.85	1	0.2681	4	0.4797	0.0099	14.70	5	0.7478	0.0099
42	0.8735	0.5230 0.8249	5.61	2	0.5066	3	0.3086	0.0106	14.75	5	0.8151	0.0106
44	0.9495	0.6173 0.8956	6.24	2	0.5530	3	0.3321	0.0114	14.79	5	0.8851	0.0114
46	1.0284	0.7102 0.9689	6.78	2	0.6013	3	0.3563	0.0122	14.83	5	0.9576	0.0122

Total Height - 16 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

			Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) [illegible] (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
12	0.0935	0.0880				4	0.0815	0.0089	12.56	4	0.0815	0.0089
14	0.1234	0.1170				5	0.1170	0.0021	13.00	5	0.1170	0.0021
16	0.1567	0.1491				5	0.1484	0.0026	13.32	5	0.1484	0.0026
18	0.1934	0.1843				5	0.1829	0.0030	13.57	5	0.1829	0.0030
20	0.2333	0.2224				5	0.2204	0.0036	13.77	5	0.2204	0.0036
22	0.2763	0.2635				5	0.2608	0.0041	13.93	5	0.2608	0.0041
24	0.3225	0.3074				5	0.3041	0.0047	14.07	5	0.3041	0.0047
26	0.3717	0.3541				5	0.3501	0.0052	14.19	5	0.3501	0.0052
28	0.4240	0.4036				5	0.3989	0.0058	14.29	5	0.3989	0.0058
30	0.4793	0.4558				5	0.4504	0.0065	14.38	5	0.4504	0.0065
32	0.5376	0.5106				5	0.5046	0.0071	14.46	5	0.5046	0.0071
34	0.5989	0.5682				5	0.5614	0.0078	14.53	5	0.5614	0.0078
36	0.6631	0.0490 0.6284				5	0.6209	0.0085	14.59	5	0.6209	0.0085
38	0.7303	0.1141 0.6913				5	0.6831	0.0092	14.65	5	0.6831	0.0092
40	0.8004	0.1922 0.7568				5	0.7478	0.0099	14.70	5	0.7478	0.0099
42	0.8735	0.2836 0.8249				5	0.8151	0.0106	14.75	5	0.8151	0.0106
44	0.9495	0.3854 0.8956	3.45	1	0.3242	4	0.5609	0.0114	14.79	5	0.8851	0.0114
46	1.0284	0.4927 0.9689	4.18	1	0.3542	4	0.6034	0.0122	14.83	5	0.9576	0.0122

Red Pine Sawlog and Pulp Volume Estimates

18 metre

Total Height - 18 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1412	0.1120	0.1347	10.03	3	0.0929	2	0.0367	0.0073	14.72	5	0.1296	0.0073
16	0.1792	0.1532	0.1716	11.21	4	0.1468	1	0.0178	0.0090	15.07	5	0.1646	0.0090
18	0.2209	0.1961	0.2119	12.00	4	0.1816	1	0.0214	0.0108	15.34	5	0.2029	0.0108
20	0.2662	0.2416	0.2555	12.59	4	0.2194	2	0.0360	0.0017	15.56	6	0.2555	0.0017
22	0.3150	0.2898	0.3024	13.05	5	0.2894	1	0.0126	0.0020	15.74	6	0.3020	0.0020
24	0.3672	0.3409	0.3524	13.42	5	0.3373	1	0.0143	0.0022	15.89	6	0.3516	0.0022
26	0.4227	0.3948	0.4055	13.73	5	0.3882	1	0.0161	0.0025	16.01	6	0.4043	0.0025
28	0.4815	0.4517	0.4616	13.99	5	0.4421	1	0.0180	0.0028	16.12	6	0.4601	0.0028
30	0.5435	0.5114	0.5206	14.22	5	0.4989	1	0.0199	0.0031	16.22	6	0.5188	0.0031
32	0.6087	0.5739	0.5827	14.42	5	0.5586	1	0.0219	0.0034	16.30	6	0.5804	0.0034
34	0.6771	0.6393	0.6476	14.59	5	0.6211	1	0.0239	0.0037	16.38	6	0.6450	0.0037
36	0.7486	0.7074	0.7153	14.74	5	0.6864	1	0.0260	0.0040	16.45	6	0.7124	0.0040
38	0.8233	0.7784	0.7859	14.88	5	0.7545	1	0.0281	0.0043	16.51	6	0.7826	0.0043
40	0.9010	0.8521	0.8593	15.01	5	0.8253	1	0.0303	0.0046	16.57	6	0.8557	0.0046
42	0.9818	0.9286	0.9356	15.12	5	0.8989	1	0.0326	0.0050	16.62	6	0.9315	0.0050
44	1.0657	1.0079	1.0145	15.22	5	0.9752	1	0.0349	0.0053	16.66	6	1.0101	0.0053
46	1.1527	1.0899	1.0963	15.32	5	1.0542	1	0.0373	0.0057	16.71	6	1.0915	0.0057
48	1.2427	1.1746	1.1808	15.41	5	1.1359	1	0.0397	0.0060	16.75	6	1.1756	0.0060
50	1.3358	1.2620	1.2680	15.49	5	1.2202	1	0.0421	0.0064	16.79	6	1.2624	0.0064
52	1.4319	1.3521	1.3579	15.56	6	1.3519	0	0.0000	0.0068	16.82	6	1.3519	0.0068
54	1.5310	1.4449	1.4506	15.64	6	1.4442	0	0.0000	0.0072	16.85	6	1.4442	0.0072
56	1.6332	1.5405	1.5459	15.70	6	1.5391	0	0.0000	0.0076	16.88	6	1.5391	0.0076
58	1.7385	1.6387	1.6440	15.76	6	1.6367	0	0.0000	0.0080	16.91	6	1.6367	0.0080
60	1.8467	1.7396	1.7447	15.82	6	1.7371	0	0.0000	0.0084	16.94	6	1.7371	0.0084

Total Height - 18 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1412		0.1347			0.0000	5	0.1296	0.0073	14.72	5	0.1296	0.0073
16	0.1792	0.0108	0.1716			0.0000	5	0.1646	0.0090	15.07	5	0.1646	0.0090
18	0.2209	0.1195	0.2119	6.21	2	0.1045	3	0.0985	0.0108	15.34	5	0.2029	0.0108
20	0.2662	0.1858	0.2555	8.27	3	0.1795	3	0.0760	0.0017	15.56	6	0.2555	0.0017
22	0.3150	0.2439	0.3024	9.46	3	0.2138	3	0.0882	0.0020	15.74	6	0.3020	0.0020
24	0.3672	0.3011	0.3524	10.29	3	0.2506	3	0.1010	0.0022	15.89	6	0.3516	0.0022
26	0.4227	0.3594	0.4055	10.93	4	0.3506	2	0.0537	0.0025	16.01	6	0.4043	0.0025
28	0.4815	0.4195	0.4616	11.45	4	0.4001	2	0.0600	0.0028	16.12	6	0.4601	0.0028
30	0.5435	0.4818	0.5206	11.87	4	0.4523	2	0.0665	0.0031	16.22	6	0.5188	0.0031
32	0.6087	0.5465	0.5827	12.23	4	0.5072	2	0.0733	0.0034	16.30	6	0.5804	0.0034
34	0.6771	0.6136	0.6476	12.55	4	0.5648	2	0.0802	0.0037	16.38	6	0.6450	0.0037
36	0.7486	0.6833	0.7153	12.82	4	0.6250	2	0.0874	0.0040	16.45	6	0.7124	0.0040
38	0.8233	0.7556	0.7859	13.06	5	0.7545	1	0.0281	0.0043	16.51	6	0.7826	0.0043
40	0.9010	0.8304	0.8593	13.28	5	0.8253	1	0.0303	0.0046	16.57	6	0.8557	0.0046
42	0.9818	0.9080	0.9356	13.47	5	0.8989	1	0.0326	0.0050	16.62	6	0.9315	0.0050
44	1.0657	0.9881	1.0145	13.64	5	0.9752	1	0.0349	0.0053	16.66	6	1.0101	0.0053
46	1.1527	1.0709	1.0963	13.80	5	1.0542	1	0.0373	0.0057	16.71	6	1.0915	0.0057
48	1.2427	1.1563	1.1808	13.95	5	1.1359	1	0.0397	0.0060	16.75	6	1.1756	0.0060
50	1.3358	1.2444	1.2680	14.09	5	1.2202	1	0.0421	0.0064	16.79	6	1.2624	0.0064
52	1.4319	1.3352	1.3579	14.21	5	1.3073	1	0.0447	0.0068	16.82	6	1.3519	0.0068
54	1.5310	1.4286	1.4506	14.33	5	1.3969	1	0.0472	0.0072	16.85	6	1.4442	0.0072
56	1.6332	1.5246	1.5459	14.44	5	1.4893	1	0.0498	0.0076	16.88	6	1.5391	0.0076
58	1.7385	1.6233	1.6440	14.54	5	1.5842	1	0.0525	0.0080	16.91	6	1.6367	0.0080
60	1.8467	1.7247	1.7447	14.63	5	1.6818	1	0.0552	0.0084	16.94	6	1.7371	0.0084

Red Pine Sawlog and Pulp Volume Estimates

18 metre

Total Height - 18 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1412		0.1347				5	0.1296	0.0073	14.72	5	0.1296	0.0073
16	0.1792		0.1716				5	0.1646	0.0090	15.07	5	0.1646	0.0090
18	0.2209		0.2119				5	0.2029	0.0108	15.34	5	0.2029	0.0108
20	0.2662		0.2555				6	0.2555	0.0017	15.56	6	0.2555	0.0017
22	0.3150	0.0502	0.3024				6	0.3020	0.0020	15.74	6	0.3020	0.0020
24	0.3672	0.1632	0.3524	4.83	1	0.0974	5	0.2542	0.0022	15.89	6	0.3516	0.0022
26	0.4227	0.2558	0.4055	6.77	2	0.2097	4	0.1946	0.0025	16.01	6	0.4043	0.0025
28	0.4815	0.3338	0.4616	7.98	3	0.3320	3	0.1281	0.0028	16.12	6	0.4601	0.0028
30	0.5435	0.4073	0.5206	8.85	3	0.3764	3	0.1424	0.0031	16.22	6	0.5188	0.0031
32	0.6087	0.4800	0.5827	9.52	3	0.4233	3	0.1571	0.0034	16.30	6	0.5804	0.0034
34	0.6771	0.5531	0.6476	10.08	3	0.4726	3	0.1724	0.0037	16.38	6	0.6450	0.0037
36	0.7486	0.6276	0.7153	10.54	4	0.6250	2	0.0874	0.0040	16.45	6	0.7124	0.0040
38	0.8233	0.7038	0.7859	10.94	4	0.6879	2	0.0947	0.0043	16.51	6	0.7826	0.0043
40	0.9010	0.7819	0.8593	11.29	4	0.7534	2	0.1022	0.0046	16.57	6	0.8557	0.0046
42	0.9818	0.8623	0.9356	11.59	4	0.8215	2	0.1100	0.0050	16.62	6	0.9315	0.0050
44	1.0657	0.9448	1.0145	11.87	4	0.8922	2	0.1179	0.0053	16.66	6	1.0101	0.0053
46	1.1527	1.0298	1.0963	12.12	4	0.9655	2	0.1260	0.0057	16.71	6	1.0915	0.0057
48	1.2427	1.1171	1.1808	12.34	4	1.0413	2	0.1343	0.0060	16.75	6	1.1756	0.0060
50	1.3358	1.2069	1.2680	12.54	4	1.1197	2	0.1427	0.0064	16.79	6	1.2624	0.0064
52	1.4319	1.2991	1.3579	12.73	4	1.2006	2	0.1514	0.0068	16.82	6	1.3519	0.0068
54	1.5310	1.3939	1.4506	12.90	4	1.2840	2	0.1602	0.0072	16.85	6	1.4442	0.0072
56	1.6332	1.4912	1.5459	13.06	5	1.4893	1	0.0498	0.0076	16.88	6	1.5391	0.0076
58	1.7385	1.5911	1.6440	13.21	5	1.5842	1	0.0525	0.0080	16.91	6	1.6367	0.0080
60	1.8467	1.6935	1.7447	13.35	5	1.6818	1	0.0552	0.0084	16.94	6	1.7371	0.0084

Total Height - 18 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1412		0.1347				5	0.1296	0.0073	14.72	5	0.1296	0.0073
16	0.1792		0.1716				5	0.1646	0.0090	15.07	5	0.1646	0.0090
18	0.2209		0.2119				5	0.2029	0.0108	15.34	5	0.2029	0.0108
20	0.2662		0.2555				6	0.2555	0.0017	15.56	6	0.2555	0.0017
22	0.3150		0.3024				6	0.3020	0.0020	15.74	6	0.3020	0.0020
24	0.3672		0.3524				6	0.3516	0.0022	15.89	6	0.3516	0.0022
26	0.4227	0.0177	0.4055				6	0.4043	0.0025	16.01	6	0.4043	0.0025
28	0.4815	0.0956	0.4616				6	0.4601	0.0028	16.12	6	0.4601	0.0028
30	0.5435	0.2053	0.5206	3.90	1	0.1516	5	0.3672	0.0031	16.22	6	0.5188	0.0031
32	0.6087	0.3166	0.5827	5.51	2	0.3102	4	0.2702	0.0034	16.30	6	0.5804	0.0034
34	0.6771	0.4157	0.6476	6.69	2	0.3477	4	0.2973	0.0037	16.38	6	0.6450	0.0037
36	0.7486	0.5077	0.7153	7.58	2	0.3872	4	0.3252	0.0040	16.45	6	0.7124	0.0040
38	0.8233	0.5966	0.7859	8.28	3	0.5784	3	0.2043	0.0043	16.51	6	0.7826	0.0043
40	0.9010	0.6844	0.8593	8.87	3	0.6348	3	0.2209	0.0046	16.57	6	0.8557	0.0046
42	0.9818	0.7723	0.9356	9.36	3	0.6936	3	0.2379	0.0050	16.62	6	0.9315	0.0050
44	1.0657	0.8612	1.0145	9.79	3	0.7547	3	0.2554	0.0053	16.66	6	1.0101	0.0053
46	1.1527	0.9514	1.0963	10.16	3	0.8182	3	0.2733	0.0057	16.71	6	1.0915	0.0057
48	1.2427	1.0432	1.1808	10.50	4	1.0413	2	0.1343	0.0060	16.75	6	1.1756	0.0060
50	1.3358	1.1368	1.2680	10.80	4	1.1197	2	0.1427	0.0064	16.79	6	1.2624	0.0064
52	1.4319	1.2325	1.3579	11.07	4	1.2006	2	0.1514	0.0068	16.82	6	1.3519	0.0068
54	1.5310	1.3303	1.4506	11.32	4	1.2840	2	0.1602	0.0072	16.85	6	1.4442	0.0072
56	1.6332	1.4303	1.5459	11.54	4	1.3699	2	0.1692	0.0076	16.88	6	1.5391	0.0076
58	1.7385	1.5326	1.6440	11.75	4	1.4584	2	0.1784	0.0080	16.91	6	1.6367	0.0080
60	1.8467	1.6373	1.7447	11.94	4	1.5493	2	0.1877	0.0084	16.94	6	1.7371	0.0084

Red Pine Sawlog and Pulp Volume Estimates

Total Height - 15 m													
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.1412	0.1120	0.1347	10.03	3	0.0929	2	0.0367	0.0073	14.72	5	0.1295	0.0073
11	0.1792	0.1532	0.1716	11.21	4	0.1468	1	0.0178	0.0090	15.07	5	0.1646	0.0090
12	0.2209	0.1961	0.2119	12.00	4	0.1816	1	0.0214	0.0108	15.34	5	0.2029	0.0108
13	0.2662	0.2416	0.2555	12.59	4	0.2194	2	0.0360	0.0017	15.56	6	0.2555	0.0017
14	0.3150	0.2898	0.3024	13.05	5	0.2694	1	0.0126	0.0020	15.74	6	0.3020	0.0020
15	0.3672	0.3409	0.3524	13.42	5	0.3373	1	0.0143	0.0022	15.89	6	0.3516	0.0022
16	0.4227	0.3948	0.4055	13.73	5	0.3882	1	0.0161	0.0025	16.01	6	0.4043	0.0025
17	0.4815	0.4517	0.4616	13.99	5	0.4421	1	0.0180	0.0028	16.12	6	0.4601	0.0028
18	0.5435	0.5114	0.5206	14.22	5	0.4989	1	0.0199	0.0031	16.22	6	0.5188	0.0031
19	0.6087	0.5739	0.5827	14.42	5	0.5586	1	0.0219	0.0034	16.30	6	0.5804	0.0034
20	0.6771	0.6393	0.6476	14.59	5	0.6211	1	0.0239	0.0037	16.38	6	0.6450	0.0037
21	0.7486	0.7074	0.7153	14.74	5	0.6864	1	0.0260	0.0040	16.45	6	0.7124	0.0040
22	0.8233	0.7784	0.7859	14.88	5	0.7545	1	0.0281	0.0043	16.51	6	0.7826	0.0043
23	0.9010	0.8521	0.8593	15.01	5	0.8253	1	0.0303	0.0046	16.57	6	0.8557	0.0046
24	0.9818	0.9286	0.9356	15.12	5	0.8989	1	0.0326	0.0050	16.62	6	0.9315	0.0050
25	1.0657	1.0079	1.0145	15.22	5	0.9752	1	0.0349	0.0053	16.66	6	1.0101	0.0053
26	1.1527	1.0899	1.0963	15.32	5	1.0542	1	0.0373	0.0057	16.71	6	1.0915	0.0057
27	1.2427	1.1746	1.1808	15.41	5	1.1359	1	0.0397	0.0060	16.75	6	1.1756	0.0060
28	1.3358	1.2620	1.2680	15.49	5	1.2202	1	0.0421	0.0064	16.79	6	1.2624	0.0064
29	1.4319	1.3521	1.3579	15.56	6	1.3519	0	0.0000	0.0068	16.82	6	1.3519	0.0068
30	1.5310	1.4449	1.4506	15.64	6	1.4442	0	0.0000	0.0072	16.85	6	1.4442	0.0072
31	1.6332	1.5405	1.5459	15.70	6	1.5391	0	0.0000	0.0076	16.88	6	1.5391	0.0076
32	1.7385	1.6387	1.6440	15.76	6	1.6367	0	0.0000	0.0080	16.91	6	1.6367	0.0080
33	1.8467	1.7396	1.7447	15.82	6	1.7371	0	0.0000	0.0084	16.94	6	1.7371	0.0084

Total Height - 15 m													
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.1412		0.1347			0.0000	5	0.1296	0.0073	14.72	5	0.1296	0.0073
11	0.1792	0.0108	0.1716			0.0000	5	0.1646	0.0090	15.07	5	0.1646	0.0090
12	0.2209	0.1195	0.2119	6.21	2	0.1045	3	0.0985	0.0108	15.34	5	0.2029	0.0108
13	0.2662	0.1858	0.2555	8.27	3	0.1795	3	0.0760	0.0017	15.56	6	0.2555	0.0017
14	0.3150	0.2439	0.3024	9.46	3	0.2138	3	0.0882	0.0020	15.74	6	0.3020	0.0020
15	0.3672	0.3011	0.3524	10.29	3	0.2506	3	0.1010	0.0022	15.89	6	0.3516	0.0022
16	0.4227	0.3594	0.4055	10.93	4	0.3506	2	0.0537	0.0025	16.01	6	0.4043	0.0025
17	0.4815	0.4195	0.4616	11.45	4	0.4001	2	0.0600	0.0028	16.12	6	0.4601	0.0028
18	0.5435	0.4818	0.5206	11.87	4	0.4523	2	0.0665	0.0031	16.22	6	0.5188	0.0031
19	0.6087	0.5465	0.5827	12.23	4	0.5072	2	0.0733	0.0034	16.30	6	0.5804	0.0034
20	0.6771	0.6136	0.6476	12.55	4	0.5648	2	0.0802	0.0037	16.38	6	0.6450	0.0037
21	0.7486	0.6833	0.7153	12.82	4	0.6250	2	0.0874	0.0040	16.45	6	0.7124	0.0040
22	0.8233	0.7556	0.7859	13.06	5	0.7545	1	0.0281	0.0043	16.51	6	0.7826	0.0043
23	0.9010	0.8304	0.8593	13.28	5	0.8253	1	0.0303	0.0046	16.57	6	0.8557	0.0046
24	0.9818	0.9080	0.9356	13.47	5	0.8989	1	0.0326	0.0050	16.62	6	0.9315	0.0050
25	1.0657	0.9881	1.0145	13.64	5	0.9752	1	0.0349	0.0053	16.66	6	1.0101	0.0053
26	1.1527	1.0709	1.0963	13.80	5	1.0542	1	0.0373	0.0057	16.71	6	1.0915	0.0057
27	1.2427	1.1563	1.1808	13.95	5	1.1359	1	0.0397	0.0060	16.75	6	1.1756	0.0060
28	1.3358	1.2444	1.2680	14.09	5	1.2202	1	0.0421	0.0064	16.79	6	1.2624	0.0064
29	1.4319	1.3352	1.3579	14.21	5	1.3073	1	0.0447	0.0068	16.82	6	1.3519	0.0068
30	1.5310	1.4286	1.4506	14.33	5	1.3969	1	0.0472	0.0072	16.85	6	1.4442	0.0072
31	1.6332	1.5246	1.5459	14.44	5	1.4893	1	0.0498	0.0076	16.88	6	1.5391	0.0076
32	1.7385	1.6233	1.6440	14.54	5	1.5842	1	0.0525	0.0080	16.91	6	1.6367	0.0080
33	1.8467	1.7247	1.7447	14.63	5	1.6818	1	0.0552	0.0084	16.94	6	1.7371	0.0084

Red Pine Sawlog and Pulp Volume Estimates

									Pulp & Unmerchantable Volume			
	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)			
	0.1412		0.1347				5	0.1296	0.0073	14.72	5	0.1296	0.0073
	0.1792		0.1716				5	0.1646	0.0090	15.07	5	0.1646	0.0090
	0.2209		0.2119				5	0.2029	0.0108	15.34	5	0.2029	0.0108
	0.2662		0.2555				6	0.2555	0.0017	15.56	6	0.2555	0.0017
	0.3150	0.0502	0.3024				6	0.3020	0.0020	15.74	6	0.3020	0.0020
	0.3672	0.1632	0.3524	4.83	1	0.0974	5	0.2542	0.0022	15.89	6	0.3516	0.0022
	0.4227	0.2558	0.4055	6.77	2	0.2097	4	0.1946	0.0025	16.01	6	0.4043	0.0025
	0.4815	0.3336	0.4616	7.98	3	0.3320	3	0.1281	0.0028	16.12	6	0.4601	0.0028
	0.5435	0.4073	0.5206	8.85	3	0.3764	3	0.1424	0.0031	16.22	6	0.5186	0.0031
	0.6087	0.4800	0.5827	9.52	3	0.4233	3	0.1571	0.0034	16.30	6	0.5804	0.0034
	0.6771	0.5531	0.6476	10.08	3	0.4726	3	0.1724	0.0037	16.38	6	0.6450	0.0037
	0.7486	0.6276	0.7153	10.54	4	0.6250	2	0.0874	0.0040	16.45	6	0.7124	0.0040
	0.8233	0.7038	0.7859	10.94	4	0.6879	2	0.0947	0.0043	16.51	6	0.7826	0.0043
	0.9010	0.7819	0.8593	11.29	4	0.7534	2	0.1022	0.0046	16.57	6	0.8557	0.0046
	0.9818	0.8623	0.9356	11.59	4	0.8215	2	0.1100	0.0050	16.62	6	0.9315	0.0050
	1.0657	0.9448	1.0145	11.87	4	0.8922	2	0.1179	0.0053	16.66	6	1.0101	0.0053
	1.1527	1.0298	1.0963	12.12	4	0.9655	2	0.1260	0.0057	16.71	6	1.0915	0.0057
	1.2427	1.1171	1.1808	12.34	4	1.0413	2	0.1343	0.0060	16.75	6	1.1756	0.0060
	1.3358	1.2069	1.2680	12.54	4	1.1197	2	0.1427	0.0064	16.79	6	1.2624	0.0064
	1.4319	1.2991	1.3579	12.73	4	1.2006	2	0.1514	0.0068	16.82	6	1.3519	0.0068
	1.5310	1.3939	1.4506	12.90	4	1.2840	2	0.1602	0.0072	16.85	6	1.4442	0.0072
	1.6332	1.4912	1.5459	13.06	5	1.4893	1	0.0498	0.0076	16.88	6	1.5391	0.0076
	1.7385	1.5911	1.6440	13.21	5	1.5842	1	0.0525	0.0080	16.91	6	1.6367	0.0080
	1.8467	1.6935	1.7447	13.35	5	1.6818	1	0.0552	0.0084	16.94	6	1.7371	0.0084

									Pulp & Unmerchantable Volume			
	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)			
	0.1412		0.1347				5	0.1296	0.0073	14.72	5	0.1296	0.0073
	0.1792		0.1716				5	0.1646	0.0090	15.07	5	0.1646	0.0090
	0.2209		0.2119				5	0.2029	0.0108	15.34	5	0.2029	0.0108
	0.2662		0.2555				6	0.2555	0.0017	15.56	6	0.2555	0.0017
	0.3150		0.3024				6	0.3020	0.0020	15.74	6	0.3020	0.0020
	0.3672		0.3524				6	0.3516	0.0022	15.89	6	0.3516	0.0022
	0.4227	0.0177	0.4055				6	0.4043	0.0025	16.01	6	0.4043	0.0025
	0.4815	0.0956	0.4616				6	0.4601	0.0028	16.12	6	0.4601	0.0028
	0.5435	0.2053	0.5206	3.90	1	0.1516	5	0.3672	0.0031	16.22	6	0.5188	0.0031
	0.6087	0.3166	0.5827	5.51	2	0.3102	4	0.2702	0.0034	16.30	6	0.5804	0.0034
	0.6771	0.4157	0.6476	6.69	2	0.3477	4	0.2973	0.0037	16.38	6	0.6450	0.0037
	0.7486	0.5077	0.7153	7.58	2	0.3872	4	0.3252	0.0040	16.45	6	0.7124	0.0040
	0.8233	0.5966	0.7859	8.28	3	0.5784	3	0.2043	0.0043	16.51	6	0.7826	0.0043
	0.9010	0.6844	0.8593	8.87	3	0.6348	3	0.2209	0.0046	16.57	6	0.8557	0.0046
	0.9818	0.7723	0.9356	9.36	3	0.6936	3	0.2379	0.0050	16.62	6	0.9315	0.0050
	1.0657	0.8612	1.0145	9.79	3	0.7547	3	0.2554	0.0053	16.66	6	1.0101	0.0053
	1.1527	0.9514	1.0963	10.16	3	0.8182	3	0.2733	0.0057	16.71	6	1.0915	0.0057
	1.2427	1.0432	1.1808	10.50	4	1.0413	2	0.1343	0.0060	16.75	6	1.1756	0.0060
	1.3358	1.1368	1.2680	10.80	4	1.1197	2	0.1427	0.0064	16.79	6	1.2624	0.0064
	1.4319	1.2325	1.3579	11.07	4	1.2006	2	0.1514	0.0068	16.82	6	1.3519	0.0068
	1.5310	1.3303	1.4506	11.32	4	1.2840	2	0.1602	0.0072	16.85	6	1.4442	0.0072
	1.6332	1.4303	1.5459	11.54	4	1.3699	2	0.1692	0.0076	16.88	6	1.5391	0.0076
	1.7385	1.5326	1.6440	11.75	4	1.4584	2	0.1784	0.0080	16.91	6	1.6367	0.0080
	1.8467	1.6373	1.7447	11.94	4	1.5493	2	0.1877	0.0084	16.94	6	1.7371	0.0084

Red Pine Sawlog and Pulp Volume Estimates

Total Height - 18 m | **Sawlog Upper Diameter - 12 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1412		0.1347				5	0.1296	0.0073	14.72	5	0.1296	0.0073
16	0.1792		0.1716				5	0.1646	0.0090	15.07	5	0.1646	0.0090
18	0.2209		0.2119				5	0.2029	0.0108	15.34	5	0.2029	0.0108
20	0.2662		0.2555				6	0.2555	0.0017	15.56	6	0.2555	0.0017
22	0.3150		0.3024				6	0.3020	0.0020	15.74	6	0.3020	0.0020
24	0.3672		0.3524				6	0.3516	0.0022	15.89	6	0.3516	0.0022
26	0.4227		0.4055				6	0.4043	0.0025	16.01	6	0.4043	0.0025
28	0.4815		0.4616				6	0.4601	0.0028	16.12	6	0.4601	0.0028
30	0.5435		0.5206				6	0.5188	0.0031	16.22	6	0.5188	0.0031
32	0.6087	0.0611	0.5827				6	0.5804	0.0034	16.30	6	0.5804	0.0034
34	0.6771	0.1465	0.6476				6	0.6450	0.0037	16.38	6	0.6450	0.0037
36	0.7486	0.2539	0.7153	3.34	1	0.2176	5	0.4947	0.0040	16.45	6	0.7124	0.0040
38	0.8233	0.3722	0.7859	4.55	1	0.2423	5	0.5403	0.0043	16.51	6	0.7826	0.0043
40	0.9010	0.4881	0.8593	5.60	2	0.4721	4	0.3835	0.0046	16.57	6	0.8557	0.0046
42	0.9818	0.5984	0.9356	6.47	2	0.5175	4	0.4140	0.0050	16.62	6	0.9315	0.0050
44	1.0657	0.7046	1.0145	7.18	2	0.5649	4	0.4452	0.0053	16.66	6	1.0101	0.0053
46	1.1527	0.8084	1.0963	7.78	2	0.6142	4	0.4773	0.0057	16.71	6	1.0915	0.0057
48	1.2427	0.9112	1.1808	8.30	3	0.8840	3	0.2916	0.0060	16.75	6	1.1756	0.0060
50	1.3358	1.0139	1.2680	8.75	3	0.9520	3	0.3103	0.0064	16.79	6	1.2624	0.0064
52	1.4319	1.1173	1.3579	9.14	3	1.0224	3	0.3295	0.0068	16.82	6	1.3519	0.0068
54	1.5310	1.2216	1.4506	9.50	3	1.0951	3	0.3491	0.0072	16.85	6	1.4442	0.0072
56	1.6332	1.3273	1.5459	9.82	3	1.1701	3	0.3691	0.0076	16.88	6	1.5391	0.0076
58	1.7385	1.4346	1.6440	10.11	3	1.2473	3	0.3894	0.0080	16.91	6	1.6367	0.0080
60	1.8467	1.5437	1.7447	10.36	3	1.3268	3	0.4102	0.0084	16.94	6	1.7371	0.0084

Total Height - 18 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1412		0.1347				5	0.1296	0.0073	14.72	5	0.1296	0.0073
16	0.1792		0.1716				5	0.1646	0.0090	15.07	5	0.1646	0.0090
18	0.2209		0.2119				5	0.2029	0.0108	15.34	5	0.2029	0.0108
20	0.2662		0.2555				6	0.2555	0.0017	15.56	6	0.2555	0.0017
22	0.3150		0.3024				6	0.3020	0.0020	15.74	6	0.3020	0.0020
24	0.3672		0.3524				6	0.3516	0.0022	15.89	6	0.3516	0.0022
26	0.4227		0.4055				6	0.4043	0.0025	16.01	6	0.4043	0.0025
28	0.4815		0.4616				6	0.4601	0.0028	16.12	6	0.4601	0.0028
30	0.5435		0.5206				6	0.5188	0.0031	16.22	6	0.5188	0.0031
32	0.6087		0.5827				6	0.5804	0.0034	16.30	6	0.5804	0.0034
34	0.6771		0.6476				6	0.6450	0.0037	16.38	6	0.6450	0.0037
36	0.7486	0.0393	0.7153				6	0.7124	0.0040	16.45	6	0.7124	0.0040
38	0.8233	0.1133	0.7859				6	0.7826	0.0043	16.51	6	0.7826	0.0043
40	0.9010	0.2037	0.8593				6	0.8557	0.0046	16.57	6	0.8557	0.0046
42	0.9818	0.3109	0.9356	3.00	1	0.2956	5	0.6359	0.0050	16.62	6	0.9315	0.0050
44	1.0657	0.4308	1.0145	3.89	1	0.3243	5	0.6858	0.0053	16.66	6	1.0101	0.0053
46	1.1527	0.5558	1.0963	4.76	1	0.3543	5	0.7372	0.0057	16.71	6	1.0915	0.0057
48	1.2427	0.6805	1.1808	5.54	2	0.6654	4	0.5102	0.0060	16.75	6	1.1756	0.0060
50	1.3358	0.8027	1.2680	6.22	2	0.7186	4	0.5436	0.0064	16.79	6	1.2624	0.0064
52	1.4319	0.9227	1.3579	6.81	2	0.7737	4	0.5783	0.0068	16.82	6	1.3519	0.0068
54	1.5310	1.0410	1.4506	7.34	2	0.8307	4	0.6135	0.0072	16.85	6	1.4442	0.0072
56	1.6332	1.1586	1.5459	7.80	2	0.8896	4	0.6495	0.0076	16.88	6	1.5391	0.0076
58	1.7385	1.2761	1.6440	8.21	3	1.2473	3	0.3894	0.0080	16.91	6	1.6367	0.0080
60	1.8467	1.3940	1.7447	8.59	3	1.3268	3	0.4102	0.0084	16.94	6	1.7371	0.0084

Red Pine Sawlog and Pulp Volume Estimates

20 metre

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.2025	0.1748	0.1948	12.65	4	0.1541	2	0.0371	0.0057	16.82	6	0.1912	0.0057
11	0.2495	0.2234	0.2404	13.51	5	0.2191	1	0.0165	0.0068	17.12	6	0.2356	0.0068
12	0.3005	0.2747	0.2898	14.15	5	0.2643	1	0.0194	0.0080	17.35	6	0.2837	0.0080
13	0.3553	0.3292	0.3428	14.64	5	0.3129	1	0.0224	0.0092	17.55	6	0.3353	0.0092
14	0.4138	0.3868	0.3992	15.04	5	0.3649	1	0.0255	0.0104	17.71	6	0.3904	0.0104
15	0.4760	0.4476	0.4591	15.37	5	0.4201	1	0.0287	0.0117	17.84	6	0.4488	0.0117
16	0.5417	0.5115	0.5222	15.66	6	0.5106	0	0.0000	0.0130	17.96	6	0.5106	0.0130
17	0.6109	0.5785	0.5886	15.90	6	0.5755	0	0.0000	0.0144	18.07	6	0.5755	0.0144
18	0.6836	0.6487	0.6582	16.11	6	0.6436	1	0.0144	0.0014	18.16	7	0.6580	0.0014
19	0.7596	0.7219	0.7309	16.29	6	0.7148	1	0.0157	0.0015	18.24	7	0.7306	0.0015
20	0.8390	0.7981	0.8067	16.46	6	0.7891	1	0.0171	0.0017	18.31	7	0.8062	0.0017
21	0.9217	0.8774	0.8856	16.61	6	0.8664	1	0.0185	0.0018	18.38	7	0.8849	0.0018
22	1.0077	0.9596	0.9675	16.74	6	0.9467	1	0.0199	0.0019	18.44	7	0.9666	0.0019
23	1.0969	1.0448	1.0523	16.86	6	1.0299	1	0.0213	0.0021	18.49	7	1.0513	0.0021
24	1.1894	1.1329	1.1401	16.98	6	1.1161	1	0.0228	0.0022	18.54	7	1.1389	0.0022
25	1.2851	1.2239	1.2309	17.08	6	1.2052	1	0.0243	0.0023	18.59	7	1.2295	0.0023
26	1.3840	1.3178	1.3246	17.17	6	1.2972	1	0.0259	0.0025	18.63	7	1.3230	0.0025
27	1.4861	1.4146	1.4212	17.26	6	1.3920	1	0.0274	0.0026	18.67	7	1.4194	0.0026
28	1.5914	1.5143	1.5206	17.34	6	1.4897	1	0.0290	0.0028	18.71	7	1.5187	0.0028
29	1.6998	1.6168	1.6230	17.42	6	1.5902	1	0.0306	0.0029	18.75	7	1.6209	0.0029
30	1.8114	1.7222	1.7281	17.49	6	1.6936	1	0.0323	0.0031	18.78	7	1.7258	0.0031
31	1.9261	1.8303	1.8361	17.55	6	1.7997	1	0.0340	0.0032	18.81	7	1.8337	0.0032
32	2.0440	1.9413	1.9470	17.62	6	1.9087	1	0.0357	0.0034	18.84	7	1.9443	0.0034

Total Height - 20 m				Sawlog Upper Diameter - 15 cm						Stump Height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.2025	0.0094	0.1948	0.82			6	0.1912	0.0057	16.82	6	0.1912	0.0057
11	0.2495	0.1414	0.2404	7.30	2	0.1058	4	0.1296	0.0068	17.12	6	0.2356	0.0068
12	0.3005	0.2147	0.2898	9.49	3	0.1849	3	0.0988	0.0080	17.35	6	0.2837	0.0080
13	0.3553	0.2796	0.3428	10.76	4	0.2742	2	0.0611	0.0092	17.55	6	0.3353	0.0092
14	0.4138	0.3438	0.3992	11.66	4	0.3206	2	0.0698	0.0104	17.71	6	0.3904	0.0104
15	0.4760	0.4092	0.4591	12.35	4	0.3700	2	0.0788	0.0117	17.84	6	0.4488	0.0117
16	0.5417	0.4767	0.5222	12.90	4	0.4223	2	0.0880	0.0130	17.96	6	0.5106	0.0130
17	0.6109	0.5465	0.5886	13.36	5	0.5400	1	0.0355	0.0144	18.07	6	0.5755	0.0144
18	0.6836	0.6189	0.6582	13.74	5	0.6045	2	0.0535	0.0014	18.16	7	0.6580	0.0014
19	0.7596	0.6941	0.7309	14.08	5	0.6721	2	0.0585	0.0015	18.24	7	0.7306	0.0015
20	0.8390	0.7719	0.8067	14.37	5	0.7426	2	0.0636	0.0017	18.31	7	0.8062	0.0017
21	0.9217	0.8526	0.8856	14.63	5	0.8161	2	0.0688	0.0018	18.38	7	0.8849	0.0018
22	1.0077	0.9360	0.9675	14.86	5	0.8924	2	0.0742	0.0019	18.44	7	0.9666	0.0019
23	1.0969	1.0223	1.0523	15.07	5	0.9716	2	0.0796	0.0021	18.49	7	1.0513	0.0021
24	1.1894	1.1114	1.1401	15.26	5	1.0537	2	0.0852	0.0022	18.54	7	1.1389	0.0022
25	1.2851	1.2033	1.2309	15.43	5	1.1386	2	0.0909	0.0023	18.59	7	1.2295	0.0023
26	1.3840	1.2980	1.3246	15.59	6	1.2972	1	0.0259	0.0025	18.63	7	1.3230	0.0025
27	1.4861	1.3955	1.4212	15.73	6	1.3920	1	0.0274	0.0026	18.67	7	1.4194	0.0026
28	1.5914	1.4958	1.5206	15.86	6	1.4897	1	0.0290	0.0028	18.71	7	1.5187	0.0028
29	1.6998	1.5989	1.6230	15.99	6	1.5902	1	0.0306	0.0029	18.75	7	1.6209	0.0029
30	1.8114	1.7049	1.7281	16.10	6	1.6936	1	0.0323	0.0031	18.78	7	1.7258	0.0031
31	1.9261	1.8136	1.8361	16.21	6	1.7997	1	0.0340	0.0032	18.81	7	1.8337	0.0032
32	2.0440	1.9251	1.9470	16.31	6	1.9087	1	0.0357	0.0034	18.84	7	1.9443	0.0034

Red Pine Sawlog and Pulp Volume Estimates

18 metre

Total Height - 18 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1412		0.1347				5	0.1296	0.0073	14.72	5	0.1296	0.0073
16	0.1792		0.1716				5	0.1646	0.0090	15.07	5	0.1646	0.0090
18	0.2209		0.2119				5	0.2029	0.0108	15.34	5	0.2029	0.0108
20	0.2662		0.2555				6	0.2555	0.0017	15.56	6	0.2555	0.0017
22	0.3150		0.3024				6	0.3020	0.0020	15.74	6	0.3020	0.0020
24	0.3672		0.3524				6	0.3516	0.0022	15.89	6	0.3516	0.0022
26	0.4227		0.4055				6	0.4043	0.0025	16.01	6	0.4043	0.0025
28	0.4815		0.4616				6	0.4601	0.0028	16.12	6	0.4601	0.0028
30	0.5435		0.5206				6	0.5188	0.0031	16.22	6	0.5188	0.0031
32	0.6087	0.0611	0.5827				6	0.5804	0.0034	16.30	6	0.5804	0.0034
34	0.6771	0.1465	0.6476				6	0.6450	0.0037	16.38	6	0.6450	0.0037
36	0.7486	0.2539	0.7153	3.34	1	0.2176	5	0.4947	0.0040	16.45	6	0.7124	0.0040
38	0.8233	0.3722	0.7859	4.55	1	0.2423	5	0.5403	0.0043	16.51	6	0.7826	0.0043
40	0.9010	0.4881	0.8593	5.60	2	0.4721	4	0.3835	0.0046	16.57	6	0.8557	0.0046
42	0.9818	0.5984	0.9356	6.47	2	0.5175	4	0.4140	0.0050	16.62	6	0.9315	0.0050
44	1.0657	0.7046	1.0145	7.18	2	0.5649	4	0.4452	0.0053	16.66	6	1.0101	0.0053
46	1.1527	0.8084	1.0963	7.78	2	0.6142	4	0.4773	0.0057	16.71	6	1.0915	0.0057
48	1.2427	0.9112	1.1808	8.30	3	0.8840	3	0.2916	0.0060	16.75	6	1.1756	0.0060
50	1.3358	1.0139	1.2680	8.75	3	0.9520	3	0.3103	0.0064	16.79	6	1.2624	0.0064
52	1.4319	1.1173	1.3579	9.14	3	1.0224	3	0.3295	0.0068	16.82	6	1.3519	0.0068
54	1.5310	1.2216	1.4506	9.50	3	1.0951	3	0.3491	0.0072	16.85	6	1.4442	0.0072
56	1.6332	1.3273	1.5459	9.82	3	1.1701	3	0.3691	0.0076	16.88	6	1.5391	0.0076
58	1.7385	1.4346	1.6440	10.11	3	1.2473	3	0.3894	0.0080	16.91	6	1.6367	0.0080
60	1.8467	1.5437	1.7447	10.38	3	1.3268	3	0.4102	0.0084	16.94	6	1.7371	0.0084

Total Height - 18 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
14	0.1412		0.1347				5	0.1296	0.0073	14.72	5	0.1296	0.0073
16	0.1792		0.1716				5	0.1646	0.0090	15.07	5	0.1646	0.0090
18	0.2209		0.2119				5	0.2029	0.0108	15.34	5	0.2029	0.0108
20	0.2662		0.2555				6	0.2555	0.0017	15.56	6	0.2555	0.0017
22	0.3150		0.3024				6	0.3020	0.0020	15.74	6	0.3020	0.0020
24	0.3672		0.3524				6	0.3516	0.0022	15.89	6	0.3516	0.0022
26	0.4227		0.4055				6	0.4043	0.0025	16.01	6	0.4043	0.0025
28	0.4815		0.4616				6	0.4601	0.0028	16.12	6	0.4601	0.0028
30	0.5435		0.5206				6	0.5188	0.0031	16.22	6	0.5188	0.0031
32	0.6087		0.5827				6	0.5804	0.0034	16.30	6	0.5804	0.0034
34	0.6771		0.6476				6	0.6450	0.0037	16.38	6	0.6450	0.0037
36	0.7486	0.0393	0.7153				6	0.7124	0.0040	16.45	6	0.7124	0.0040
38	0.8233	0.1133	0.7859				6	0.7826	0.0043	16.51	6	0.7826	0.0043
40	0.9010	0.2037	0.8593				6	0.8557	0.0046	16.57	6	0.8557	0.0046
42	0.9818	0.3109	0.9356	3.00	1	0.2956	5	0.6359	0.0050	16.62	6	0.9315	0.0050
44	1.0657	0.4308	1.0145	3.89	1	0.3243	5	0.6858	0.0053	16.66	6	1.0101	0.0053
46	1.1527	0.5558	1.0963	4.76	1	0.3543	5	0.7372	0.0057	16.71	6	1.0915	0.0057
48	1.2427	0.6805	1.1808	5.54	2	0.6654	4	0.5102	0.0060	16.75	6	1.1756	0.0060
50	1.3358	0.8027	1.2680	6.22	2	0.7186	4	0.5438	0.0064	16.79	6	1.2624	0.0064
52	1.4319	0.9227	1.3579	6.81	2	0.7737	4	0.5783	0.0068	16.82	6	1.3519	0.0068
54	1.5310	1.0410	1.4506	7.34	2	0.8307	4	0.6135	0.0072	16.85	6	1.4442	0.0072
56	1.6332	1.1586	1.5459	7.80	2	0.8896	4	0.6495	0.0076	16.88	6	1.5391	0.0076
58	1.7385	1.2761	1.6440	8.21	3	1.2473	3	0.3894	0.0080	16.91	6	1.6367	0.0080
60	1.8467	1.3940	1.7447	8.59	3	1.3268	3	0.4102	0.0084	16.94	6	1.7371	0.0084

Red Pine Sawlog and Pulp Volume Estimates

20 metre

Total Height - 20 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.2025	0.1748	0.1948	12.65	4	0.1541	2	0.0371	0.0057	16.82	6	0.1912	0.0057
18	0.2495	0.2234	0.2404	13.51	5	0.2191	1	0.0165	0.0068	17.12	6	0.2356	0.0068
20	0.3005	0.2747	0.2898	14.15	5	0.2643	1	0.0194	0.0080	17.35	6	0.2837	0.0080
22	0.3553	0.3292	0.3428	14.64	5	0.3129	1	0.0224	0.0092	17.55	6	0.3353	0.0092
24	0.4138	0.3868	0.3992	15.04	5	0.3649	1	0.0255	0.0104	17.71	6	0.3904	0.0104
26	0.4760	0.4476	0.4591	15.37	5	0.4201	1	0.0287	0.0117	17.84	6	0.4488	0.0117
28	0.5417	0.5115	0.5222	15.66	6	0.5106	0	0.0000	0.0130	17.96	6	0.5106	0.0130
30	0.6109	0.5785	0.5886	15.90	6	0.5755	0	0.0000	0.0144	18.07	6	0.5755	0.0144
32	0.6836	0.6487	0.6582	16.11	6	0.6436	1	0.0144	0.0014	18.16	7	0.6580	0.0014
34	0.7596	0.7219	0.7309	16.29	6	0.7148	1	0.0157	0.0015	18.24	7	0.7306	0.0015
36	0.8390	0.7981	0.8067	16.46	6	0.7891	1	0.0171	0.0017	18.31	7	0.8062	0.0017
38	0.9217	0.8774	0.8856	16.61	6	0.8664	1	0.0185	0.0018	18.38	7	0.8849	0.0018
40	1.0077	0.9596	0.9675	16.74	6	0.9467	1	0.0199	0.0019	18.44	7	0.9666	0.0019
42	1.0969	1.0448	1.0523	16.86	6	1.0299	1	0.0213	0.0021	18.49	7	1.0513	0.0021
44	1.1894	1.1329	1.1401	16.98	6	1.1161	1	0.0228	0.0022	18.54	7	1.1389	0.0022
46	1.2851	1.2239	1.2309	17.08	6	1.2052	1	0.0243	0.0023	18.59	7	1.2295	0.0023
48	1.3840	1.3178	1.3246	17.17	6	1.2972	1	0.0259	0.0025	18.63	7	1.3230	0.0025
50	1.4861	1.4146	1.4212	17.26	6	1.3920	1	0.0274	0.0026	18.67	7	1.4194	0.0026
52	1.5914	1.5143	1.5206	17.34	6	1.4897	1	0.0290	0.0028	18.71	7	1.5187	0.0028
54	1.6998	1.6168	1.6230	17.42	6	1.5902	1	0.0306	0.0029	18.75	7	1.6209	0.0029
56	1.8114	1.7222	1.7281	17.49	6	1.6936	1	0.0323	0.0031	18.78	7	1.7258	0.0031
58	1.9261	1.8303	1.8361	17.55	6	1.7997	1	0.0340	0.0032	18.81	7	1.8337	0.0032
60	2.0440	1.9413	1.9470	17.62	6	1.9087	1	0.0357	0.0034	18.84	7	1.9443	0.0034

Total Height - 20 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.2025	0.0094	0.1948	0.82			6	0.1912	0.0057	16.82	6	0.1912	0.0057
18	0.2495	0.1414	0.2404	7.30	2	0.1058	4	0.1298	0.0068	17.12	6	0.2356	0.0068
20	0.3005	0.2147	0.2898	9.49	3	0.1849	3	0.0988	0.0080	17.35	6	0.2837	0.0080
22	0.3553	0.2796	0.3428	10.76	4	0.2742	2	0.0611	0.0092	17.55	6	0.3353	0.0092
24	0.4138	0.3438	0.3992	11.66	4	0.3206	2	0.0698	0.0104	17.71	6	0.3904	0.0104
26	0.4760	0.4092	0.4591	12.35	4	0.3700	2	0.0788	0.0117	17.84	6	0.4488	0.0117
28	0.5417	0.4767	0.5222	12.90	4	0.4223	2	0.0882	0.0130	17.96	6	0.5106	0.0130
30	0.6109	0.5465	0.5886	13.36	5	0.5400	1	0.0355	0.0144	18.07	6	0.5755	0.0144
32	0.6836	0.6189	0.6582	13.74	5	0.6045	2	0.0535	0.0014	18.16	7	0.6580	0.0014
34	0.7596	0.6941	0.7309	14.08	5	0.6721	2	0.0585	0.0015	18.24	7	0.7306	0.0015
36	0.8390	0.7719	0.8067	14.37	5	0.7426	2	0.0636	0.0017	18.31	7	0.8062	0.0017
38	0.9217	0.8526	0.8856	14.63	5	0.8161	2	0.0688	0.0018	18.38	7	0.8849	0.0018
40	1.0077	0.9360	0.9675	14.86	5	0.8924	2	0.0742	0.0019	18.44	7	0.9666	0.0019
42	1.0969	1.0223	1.0523	15.07	5	0.9716	2	0.0796	0.0021	18.49	7	1.0513	0.0021
44	1.1894	1.1114	1.1401	15.26	5	1.0537	2	0.0852	0.0022	18.54	7	1.1389	0.0022
46	1.2851	1.2033	1.2309	15.43	5	1.1386	2	0.0909	0.0023	18.59	7	1.2295	0.0023
48	1.3840	1.2980	1.3246	15.59	6	1.2972	1	0.0259	0.0025	18.63	7	1.3230	0.0025
50	1.4861	1.3955	1.4212	15.73	6	1.3920	1	0.0274	0.0026	18.67	7	1.4194	0.0026
52	1.5914	1.4958	1.5206	15.86	6	1.4897	1	0.0290	0.0028	18.71	7	1.5187	0.0028
54	1.6998	1.5989	1.6230	15.99	6	1.5902	1	0.0306	0.0029	18.75	7	1.6209	0.0029
56	1.8114	1.7049	1.7281	16.10	6	1.6936	1	0.0323	0.0031	18.78	7	1.7258	0.0031
58	1.9261	1.8136	1.8361	16.21	6	1.7997	1	0.0340	0.0032	18.81	7	1.8337	0.0032
60	2.0440	1.9251	1.9470	16.31	6	1.9087	1	0.0357	0.0034	18.84	7	1.9443	0.0034

Red Pine Sawlog and Pulp Volume Estimates

20 metre

Total Height - 20 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.2025		0.1948				6	0.1912	0.0057	16.82	6	0.1912	0.0057
18	0.2495		0.2404				6	0.2356	0.0068	17.12	6	0.2356	0.0068
20	0.3005		0.2898				6	0.2837	0.0080	17.35	6	0.2837	0.0080
22	0.3553	0.0534	0.3428				6	0.3353	0.0092	17.55	6	0.3353	0.0092
24	0.4138	0.1934	0.3992	5.71	2	0.1830	4	0.2074	0.0104	17.71	6	0.3904	0.0104
26	0.4760	0.2972	0.4591	7.84	2	0.2130	4	0.2358	0.0117	17.84	6	0.4488	0.0117
28	0.5417	0.3839	0.5222	9.14	3	0.3431	3	0.1674	0.0130	17.96	6	0.5106	0.0130
30	0.6109	0.4659	0.5886	10.08	3	0.3893	3	0.1863	0.0144	18.07	6	0.5755	0.0144
32	0.6836	0.5469	0.6582	10.81	4	0.5357	3	0.1223	0.0014	18.16	7	0.6580	0.0014
34	0.7596	0.6285	0.7309	11.40	4	0.5967	3	0.1339	0.0015	18.24	7	0.7306	0.0015
36	0.8390	0.7115	0.8067	11.90	4	0.6604	3	0.1458	0.0017	18.31	7	0.8062	0.0017
38	0.9217	0.7963	0.8856	12.33	4	0.7269	3	0.1580	0.0018	18.38	7	0.8849	0.0018
40	1.0077	0.8833	0.9675	12.70	4	0.7960	3	0.1705	0.0019	18.44	7	0.9666	0.0019
42	1.0969	0.9726	1.0523	13.03	5	0.9716	2	0.0796	0.0021	18.49	7	1.0513	0.0021
44	1.1894	1.0643	1.1401	13.32	5	1.0537	2	0.0852	0.0022	18.54	7	1.1389	0.0022
46	1.2851	1.1584	1.2309	13.59	5	1.1386	2	0.0909	0.0023	18.59	7	1.2295	0.0023
48	1.3840	1.2552	1.3246	13.83	5	1.2263	2	0.0968	0.0025	18.63	7	1.3230	0.0025
50	1.4861	1.3545	1.4212	14.05	5	1.3167	2	0.1027	0.0026	18.67	7	1.4194	0.0026
52	1.5914	1.4565	1.5206	14.25	5	1.4100	2	0.1088	0.0028	18.71	7	1.5187	0.0028
54	1.6998	1.5611	1.6230	14.43	5	1.5059	2	0.1149	0.0029	18.75	7	1.6209	0.0029
56	1.8114	1.6683	1.7281	14.60	5	1.6046	2	0.1212	0.0031	18.78	7	1.7258	0.0031
58	1.9261	1.7783	1.8361	14.76	5	1.7061	2	0.1276	0.0032	18.81	7	1.8337	0.0032
60	2.0440	1.8909	1.9470	14.91	5	1.8102	2	0.1341	0.0034	18.84	7	1.9443	0.0034

Total Height - 20 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.2025		0.1948				6	0.1912	0.0057	16.82	6	0.1912	0.0057
18	0.2495		0.2404				6	0.2356	0.0068	17.12	6	0.2356	0.0068
20	0.3005		0.2898				6	0.2837	0.0080	17.35	6	0.2837	0.0080
22	0.3553		0.3428				6	0.3353	0.0092	17.55	6	0.3353	0.0092
24	0.4138		0.3992				6	0.3904	0.0104	17.71	6	0.3904	0.0104
26	0.4760	0.0122	0.4591				6	0.4488	0.0117	17.84	6	0.4488	0.0117
28	0.5417	0.1032	0.5222				6	0.5106	0.0130	17.96	6	0.5106	0.0130
30	0.6109	0.2379	0.5886	4.52	1	0.1518	5	0.4237	0.0144	18.07	6	0.5755	0.0144
32	0.6836	0.3673	0.6582	6.40	2	0.3155	5	0.3425	0.0014	18.16	7	0.6580	0.0014
34	0.7596	0.4785	0.7309	7.70	2	0.3538	5	0.3767	0.0015	18.24	7	0.7306	0.0015
36	0.8390	0.5809	0.8067	8.67	3	0.5427	4	0.2635	0.0017	18.31	7	0.8062	0.0017
38	0.9217	0.6796	0.8856	9.43	3	0.5988	4	0.2861	0.0018	18.38	7	0.8849	0.0018
40	1.0077	0.7771	0.9675	10.06	3	0.6573	4	0.3093	0.0019	18.44	7	0.9666	0.0019
42	1.0969	0.8746	1.0523	10.60	4	0.8679	3	0.1834	0.0021	18.49	7	1.0513	0.0021
44	1.1894	0.9731	1.1401	11.06	4	0.9425	3	0.1965	0.0022	18.54	7	1.1389	0.0022
46	1.2851	1.0730	1.2309	11.46	4	1.0197	3	0.2098	0.0023	18.59	7	1.2295	0.0023
48	1.3840	1.1745	1.3246	11.82	4	1.0995	3	0.2235	0.0025	18.63	7	1.3230	0.0025
50	1.4861	1.2781	1.4212	12.14	4	1.1819	3	0.2375	0.0026	18.67	7	1.4194	0.0026
52	1.5914	1.3837	1.5206	12.43	4	1.2670	3	0.2517	0.0028	18.71	7	1.5187	0.0028
54	1.6998	1.4916	1.6230	12.70	4	1.3546	3	0.2662	0.0029	18.75	7	1.6209	0.0029
56	1.8114	1.6018	1.7281	12.94	4	1.4448	3	0.2810	0.0031	18.78	7	1.7258	0.0031
58	1.9261	1.7143	1.8361	13.17	5	1.7061	2	0.1276	0.0032	18.81	7	1.8337	0.0032
60	2.0440	1.8294	1.9470	13.37	5	1.8102	2	0.1341	0.0034	18.84	7	1.9443	0.0034

Red Pine Sawlog and Pulp Volume Estimates

20 metre

Total Height - 20 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.2025		0.1948				6	0.1912	0.0057	16.82	6	0.1912	0.0057
18	0.2495		0.2404				6	0.2356	0.0068	17.12	6	0.2356	0.0068
20	0.3005		0.2898				6	0.2837	0.0080	17.35	6	0.2837	0.0080
22	0.3553		0.3428				6	0.3353	0.0092	17.55	6	0.3353	0.0092
24	0.4138		0.3992				6	0.3904	0.0104	17.71	6	0.3904	0.0104
26	0.4760		0.4591				6	0.4488	0.0117	17.84	6	0.4488	0.0117
28	0.5417		0.5222				6	0.5106	0.0130	17.96	6	0.5106	0.0130
30	0.6109		0.5886				6	0.5755	0.0144	18.07	6	0.5755	0.0144
32	0.6836	0.0580	0.6582				7	0.6580	0.0014	18.16	7	0.6580	0.0014
34	0.7596	0.1575	0.7309				7	0.7306	0.0015	18.24	7	0.7306	0.0015
36	0.8390	0.2865	0.8067	3.78	1	0.2179	6	0.5883	0.0017	18.31	7	0.8062	0.0017
38	0.9217	0.4265	0.8856	5.24	1	0.2426	6	0.6423	0.0018	18.38	7	0.8849	0.0018
40	1.0077	0.5593	0.9675	6.45	2	0.4807	5	0.4859	0.0019	18.44	7	0.9666	0.0019
42	1.0969	0.6831	1.0523	7.41	2	0.5270	5	0.5243	0.0021	18.49	7	1.0513	0.0021
44	1.1894	0.8012	1.1401	8.19	3	0.7816	4	0.3574	0.0022	18.54	7	1.1389	0.0022
46	1.2851	0.9163	1.2309	8.85	3	0.8473	4	0.3822	0.0023	18.59	7	1.2295	0.0023
48	1.3840	1.0300	1.3246	9.41	3	0.9153	4	0.4077	0.0025	18.63	7	1.3230	0.0025
50	1.4861	1.1435	1.4212	9.89	3	0.9858	4	0.4337	0.0026	18.67	7	1.4194	0.0026
52	1.5914	1.2575	1.5206	10.32	3	1.0585	4	0.4602	0.0028	18.71	7	1.5187	0.0028
54	1.6998	1.3725	1.6230	10.71	4	1.3546	3	0.2662	0.0029	18.75	7	1.6209	0.0029
56	1.8114	1.4889	1.7281	11.05	4	1.4448	3	0.2810	0.0031	18.78	7	1.7258	0.0031
58	1.9261	1.6069	1.8361	11.37	4	1.5376	3	0.2961	0.0032	18.81	7	1.8337	0.0032
60	2.0440	1.7267	1.9470	11.66	4	1.6330	3	0.3114	0.0034	18.84	7	1.9443	0.0034

Total Height - 20 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
16	0.2025		0.1948				6	0.1912	0.0057	16.82	6	0.1912	0.0057
18	0.2495		0.2404				6	0.2356	0.0068	17.12	6	0.2356	0.0068
20	0.3005		0.2898				6	0.2837	0.0080	17.35	6	0.2837	0.0080
22	0.3553		0.3428				6	0.3353	0.0092	17.55	6	0.3353	0.0092
24	0.4138		0.3992				6	0.3904	0.0104	17.71	6	0.3904	0.0104
26	0.4760		0.4591				6	0.4488	0.0117	17.84	6	0.4488	0.0117
28	0.5417		0.5222				6	0.5106	0.0130	17.96	6	0.5106	0.0130
30	0.6109		0.5886				6	0.5755	0.0144	18.07	6	0.5755	0.0144
32	0.6836		0.6582				7	0.6580	0.0014	18.16	7	0.6580	0.0014
34	0.7596		0.7309				7	0.7306	0.0015	18.24	7	0.7306	0.0015
36	0.8390	0.0291	0.8067				7	0.8062	0.0017	18.31	7	0.8062	0.0017
38	0.9217	0.1131	0.8856				7	0.8849	0.0018	18.38	7	0.8849	0.0018
40	1.0077	0.2177	0.9675				7	0.9666	0.0019	18.44	7	0.9666	0.0019
42	1.0969	0.3438	1.0523	3.33	1	0.2960	6	0.7553	0.0021	18.49	7	1.0513	0.0021
44	1.1894	0.4849	1.1401	4.41	1	0.3246	6	0.8143	0.0022	18.54	7	1.1389	0.0022
46	1.2851	0.6299	1.2309	5.43	2	0.6255	5	0.6040	0.0023	18.59	7	1.2295	0.0023
48	1.3840	0.7716	1.3246	6.32	2	0.6777	5	0.6453	0.0025	18.63	7	1.3230	0.0025
50	1.4861	0.9087	1.4212	7.09	2	0.7318	5	0.6876	0.0026	18.67	7	1.4194	0.0026
52	1.5914	1.0421	1.5206	7.75	2	0.7879	5	0.7308	0.0028	18.71	7	1.5187	0.0028
54	1.6998	1.1732	1.6230	8.32	3	1.1336	4	0.4873	0.0029	18.75	7	1.6209	0.0029
56	1.8114	1.3030	1.7281	8.83	3	1.2110	4	0.5149	0.0031	18.78	7	1.7258	0.0031
58	1.9261	1.4324	1.8361	9.28	3	1.2907	4	0.5430	0.0032	18.81	7	1.8337	0.0032
60	2.0440	1.5620	1.9470	9.68	3	1.3727	4	0.5716	0.0034	18.84	7	1.9443	0.0034

Red Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.2025		0.1948				6	0.1912	0.0057	16.82	6	0.1912	0.0057
0.2495		0.2404				6	0.2356	0.0068	17.12	6	0.2356	0.0068
0.3005		0.2898				6	0.2837	0.0080	17.35	6	0.2837	0.0080
0.3553	0.0534	0.3428				6	0.3353	0.0092	17.55	6	0.3353	0.0092
0.4138	0.1934	0.3992	5.71	2	0.1830	4	0.2074	0.0104	17.71	6	0.3904	0.0104
0.4760	0.2972	0.4591	7.84	2	0.2130	4	0.2358	0.0117	17.84	6	0.4488	0.0117
0.5417	0.3839	0.5222	9.14	3	0.3431	3	0.1674	0.0130	17.96	6	0.5106	0.0130
0.6109	0.4659	0.5886	10.06	3	0.3893	3	0.1863	0.0144	18.07	6	0.5755	0.0144
0.6836	0.5469	0.6582	10.81	4	0.5357	3	0.1223	0.0014	18.16	7	0.6580	0.0014
0.7596	0.6285	0.7309	11.40	4	0.5967	3	0.1339	0.0015	18.24	7	0.7306	0.0015
0.8390	0.7115	0.8067	11.90	4	0.6604	3	0.1458	0.0017	18.31	7	0.8062	0.0017
0.9217	0.7963	0.8856	12.33	4	0.7269	3	0.1580	0.0018	18.38	7	0.8849	0.0018
1.0077	0.8833	0.9675	12.70	4	0.7960	3	0.1705	0.0019	18.44	7	0.9666	0.0019
1.0969	0.9726	1.0523	13.03	5	0.9716	2	0.0796	0.0021	18.49	7	1.0513	0.0021
1.1894	1.0643	1.1401	13.32	5	1.0537	2	0.0852	0.0022	18.54	7	1.1389	0.0022
1.2851	1.1584	1.2309	13.59	5	1.1386	2	0.0909	0.0023	18.59	7	1.2295	0.0023
1.3840	1.2552	1.3246	13.83	5	1.2263	2	0.0968	0.0025	18.63	7	1.3230	0.0025
1.4861	1.3545	1.4212	14.05	5	1.3167	2	0.1027	0.0026	18.67	7	1.4194	0.0026
1.5914	1.4565	1.5206	14.25	5	1.4100	2	0.1088	0.0028	18.71	7	1.5187	0.0028
1.6998	1.5611	1.6230	14.43	5	1.5059	2	0.1149	0.0029	18.75	7	1.6209	0.0029
1.8114	1.6683	1.7281	14.60	5	1.6046	2	0.1212	0.0031	18.78	7	1.7258	0.0031
1.9261	1.7783	1.8361	14.76	5	1.7061	2	0.1276	0.0032	18.81	7	1.8337	0.0032
2.0440	1.8909	1.9470	14.91	5	1.8102	2	0.1341	0.0034	18.84	7	1.9443	0.0034

Total Height - 30 m

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.2025		0.1948				6	0.1912	0.0057	16.82	6	0.1912	0.0057
0.2495		0.2404				6	0.2356	0.0068	17.12	6	0.2356	0.0068
0.3005		0.2898				6	0.2837	0.0080	17.35	6	0.2837	0.0080
0.3553		0.3428				6	0.3353	0.0092	17.55	6	0.3353	0.0092
0.4138		0.3992				6	0.3904	0.0104	17.71	6	0.3904	0.0104
0.4760	0.0122	0.4591				6	0.4488	0.0117	17.84	6	0.4488	0.0117
0.5417	0.1032	0.5222				6	0.5106	0.0130	17.96	6	0.5106	0.0130
0.6109	0.2379	0.5886	4.52	1	0.1518	5	0.4237	0.0144	18.07	6	0.5755	0.0144
0.6836	0.3673	0.6582	6.40	2	0.3155	5	0.3425	0.0014	18.16	7	0.6580	0.0014
0.7596	0.4785	0.7309	7.70	2	0.3538	5	0.3767	0.0015	18.24	7	0.7306	0.0015
0.8390	0.5809	0.8067	8.67	3	0.5427	4	0.2635	0.0017	18.31	7	0.8062	0.0017
0.9217	0.6796	0.8856	9.43	3	0.5988	4	0.2861	0.0018	18.38	7	0.8849	0.0018
1.0077	0.7771	0.9675	10.06	3	0.6573	4	0.3093	0.0019	18.44	7	0.9666	0.0019
1.0969	0.8746	1.0523	10.60	4	0.8679	3	0.1834	0.0021	18.49	7	1.0513	0.0021
1.1894	0.9731	1.1401	11.06	4	0.9425	3	0.1965	0.0022	18.54	7	1.1389	0.0022
1.2851	1.0730	1.2309	11.46	4	1.0197	3	0.2098	0.0023	18.59	7	1.2295	0.0023
1.3840	1.1745	1.3246	11.82	4	1.0995	3	0.2235	0.0025	18.63	7	1.3230	0.0025
1.4861	1.2781	1.4212	12.14	4	1.1819	3	0.2375	0.0026	18.67	7	1.4194	0.0026
1.5914	1.3837	1.5206	12.43	4	1.2670	3	0.2517	0.0028	18.71	7	1.5187	0.0028
1.6998	1.4916	1.6230	12.70	4	1.3546	3	0.2662	0.0029	18.75	7	1.6209	0.0029
1.8114	1.6018	1.7281	12.94	4	1.4448	3	0.2810	0.0031	18.78	7	1.7258	0.0031
1.9261	1.7143	1.8361	13.17	5	1.7061	2	0.1276	0.0032	18.81	7	1.8337	0.0032
2.0440	1.8294	1.9470	13.37	5	1.8102	2	0.1341	0.0034	18.84	7	1.9443	0.0034

Red Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.2025		0.1948				6	0.1912	0.0057	16.82	6	0.1912	0.0057
0.2495		0.2404				6	0.2356	0.0068	17.12	6	0.2356	0.0068
0.3005		0.2896				6	0.2837	0.0080	17.35	6	0.2837	0.0080
0.3553		0.3428				6	0.3353	0.0092	17.55	6	0.3353	0.0092
0.4138		0.3992				6	0.3904	0.0104	17.71	6	0.3904	0.0104
0.4760		0.4591				6	0.4488	0.0117	17.84	6	0.4488	0.0117
0.5417		0.5222				6	0.5106	0.0130	17.96	6	0.5106	0.0130
0.6109		0.5886				6	0.5755	0.0144	18.07	6	0.5755	0.0144
0.6836	0.0580	0.6582				7	0.6580	0.0014	18.16	7	0.6580	0.0014
0.7596	0.1575	0.7309				7	0.7306	0.0015	18.24	7	0.7306	0.0015
0.8390	0.2865	0.8067	3.78	1	0.2179	6	0.5883	0.0017	18.31	7	0.8062	0.0017
0.9217	0.4265	0.8856	5.24	1	0.2426	6	0.6423	0.0018	18.38	7	0.8849	0.0018
1.0077	0.5593	0.9675	6.45	2	0.4807	5	0.4859	0.0019	18.44	7	0.9666	0.0019
1.0969	0.6831	1.0523	7.41	2	0.5270	5	0.5243	0.0021	18.49	7	1.0513	0.0021
1.1894	0.8012	1.1401	8.19	3	0.7816	4	0.3574	0.0022	18.54	7	1.1389	0.0022
1.2851	0.9163	1.2309	8.85	3	0.8473	4	0.3822	0.0023	18.59	7	1.2295	0.0023
1.3840	1.0300	1.3246	9.41	3	0.9153	4	0.4077	0.0025	18.63	7	1.3230	0.0025
1.4861	1.1435	1.4212	9.89	3	0.9858	4	0.4337	0.0026	18.67	7	1.4194	0.0026
1.5914	1.2575	1.5206	10.32	3	1.0585	4	0.4602	0.0028	18.71	7	1.5187	0.0028
1.6998	1.3725	1.6230	10.71	4	1.3546	3	0.2662	0.0029	18.75	7	1.6209	0.0029
1.8114	1.4889	1.7281	11.05	4	1.4448	3	0.2810	0.0031	18.78	7	1.7258	0.0031
1.9261	1.6069	1.8361	11.37	4	1.5376	3	0.2961	0.0032	18.81	7	1.8337	0.0032
2.0440	1.7267	1.9470	11.66	4	1.6330	3	0.3114	0.0034	18.84	7	1.9443	0.0034

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.2025		0.1948				6	0.1912	0.0057	16.82	6	0.1912	0.0057
0.2495		0.2404				6	0.2356	0.0068	17.12	6	0.2356	0.0068
0.3005		0.2896				6	0.2837	0.0080	17.35	6	0.2837	0.0080
0.3553		0.3428				6	0.3353	0.0092	17.55	6	0.3353	0.0092
0.4138		0.3992				6	0.3904	0.0104	17.71	6	0.3904	0.0104
0.4760		0.4591				6	0.4488	0.0117	17.84	6	0.4488	0.0117
0.5417		0.5222				6	0.5106	0.0130	17.96	6	0.5106	0.0130
0.6109		0.5886				6	0.5755	0.0144	18.07	6	0.5755	0.0144
0.6836		0.6582				7	0.6580	0.0014	18.16	7	0.6580	0.0014
0.7596		0.7309				7	0.7306	0.0015	18.24	7	0.7306	0.0015
0.8390	0.0291	0.8067				7	0.8062	0.0017	18.31	7	0.8062	0.0017
0.9217	0.1131	0.8856				7	0.8849	0.0018	18.38	7	0.8849	0.0018
1.0077	0.2177	0.9675				7	0.9666	0.0019	18.44	7	0.9666	0.0019
1.0969	0.3436	1.0523	3.33	1	0.2960	6	0.7553	0.0021	18.49	7	1.0513	0.0021
1.1894	0.4849	1.1401	4.41	1	0.3246	6	0.8143	0.0022	18.54	7	1.1389	0.0022
1.2851	0.6299	1.2309	5.43	2	0.6255	5	0.6040	0.0023	18.59	7	1.2295	0.0023
1.3840	0.7716	1.3246	6.32	2	0.6777	5	0.6453	0.0025	18.63	7	1.3230	0.0025
1.4861	0.9087	1.4212	7.09	2	0.7318	5	0.6878	0.0026	18.67	7	1.4194	0.0026
1.5914	1.0421	1.5206	7.75	2	0.7879	5	0.7306	0.0028	18.71	7	1.5187	0.0028
1.6998	1.1732	1.6230	8.32	3	1.1336	4	0.4873	0.0029	18.75	7	1.6209	0.0029
1.8114	1.3030	1.7281	8.83	3	1.2110	4	0.5149	0.0031	18.78	7	1.7258	0.0031
1.9261	1.4324	1.8361	9.26	3	1.2907	4	0.5430	0.0032	18.81	7	1.8337	0.0032
2.0440	1.5620	1.9470	9.66	3	1.3727	4	0.5716	0.0034	18.84	7	1.9443	0.0034

Red Pine Sawlog and Pulp Volume Estimates

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.2789	0.2515	0.2698	15.03	5	0.2320	2	0.0358	0.0042	18.90	7	0.2678	0.0042
12	0.3359	0.3090	0.3252	15.71	6	0.3076	1	0.0147	0.0049	19.16	7	0.3223	0.0049
14	0.3970	0.3699	0.3845	16.24	6	0.3638	1	0.0169	0.0056	19.36	7	0.3807	0.0056
16	0.4622	0.4344	0.4477	16.67	6	0.4238	1	0.0193	0.0063	19.54	7	0.4430	0.0063
18	0.5314	0.5023	0.5146	17.03	6	0.4874	1	0.0217	0.0071	19.68	7	0.5091	0.0071
20	0.6044	0.5737	0.5852	17.33	6	0.5546	1	0.0242	0.0079	19.81	7	0.5787	0.0079
22	0.6812	0.6485	0.6593	17.59	6	0.6252	1	0.0267	0.0087	19.92	7	0.6519	0.0087
24	0.7618	0.7266	0.7369	17.82	6	0.6992	1	0.0294	0.0096	20.02	7	0.7286	0.0096
26	0.8459	0.8081	0.8178	18.01	6	0.7766	1	0.0321	0.0105	20.11	7	0.8086	0.0105
28	0.9337	0.8929	0.9021	18.19	7	0.8920	0	0.0000	0.0113	20.18	7	0.8920	0.0113
30	1.0250	0.9809	0.9897	18.35	7	0.9787	0	0.0000	0.0122	20.25	7	0.9787	0.0122
32	1.1198	1.0721	1.0806	18.49	7	1.0685	0	0.0000	0.0132	20.32	7	1.0685	0.0132
34	1.2180	1.1665	1.1746	18.62	7	1.1616	0	0.0000	0.0141	20.38	7	1.1616	0.0141
36	1.3197	1.2641	1.2719	18.74	7	1.2578	0	0.0000	0.0151	20.43	7	1.2578	0.0151
38	1.4248	1.3647	1.3722	18.85	7	1.3572	0	0.0000	0.0160	20.48	7	1.3572	0.0160
40	1.5332	1.4684	1.4757	18.95	7	1.4596	0	0.0000	0.0170	20.53	7	1.4596	0.0170
42	1.6450	1.5752	1.5822	19.04	7	1.5651	0	0.0000	0.0181	20.57	7	1.5651	0.0181
44	1.7601	1.6850	1.6918	19.13	7	1.6737	0	0.0000	0.0191	20.61	7	1.6737	0.0191
46	1.8786	1.7978	1.8045	19.21	7	1.7852	1	0.0192	0.0010	20.65	8	1.8044	0.0010
48	2.0003	1.9137	1.9201	19.29	7	1.8998	1	0.0202	0.0010	20.68	8	1.9200	0.0010
50	2.1253	2.0325	2.0387	19.36	7	2.0173	1	0.0212	0.0011	20.72	8	2.0385	0.0011
52	2.2536	2.1543	2.1604	19.42	7	2.1378	1	0.0223	0.0011	20.75	8	2.1601	0.0011

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.2789	0.1648	0.2698	8.45	3	0.1552	4	0.1125	0.0042	18.90	7	0.2678	0.0042
12	0.3359	0.2450	0.3252	10.74	4	0.2399	3	0.0824	0.0049	19.16	7	0.3223	0.0049
14	0.3970	0.3169	0.3845	12.09	4	0.2852	3	0.0956	0.0056	19.36	7	0.3807	0.0056
16	0.4622	0.3884	0.4477	13.05	5	0.3875	2	0.0556	0.0063	19.54	7	0.4430	0.0063
18	0.5314	0.4612	0.5146	13.78	5	0.4464	2	0.0627	0.0071	19.68	7	0.5091	0.0071
20	0.6044	0.5364	0.5852	14.37	5	0.5087	2	0.0700	0.0079	19.81	7	0.5787	0.0079
22	0.6812	0.6141	0.6593	14.86	5	0.5744	2	0.0776	0.0087	19.92	7	0.6519	0.0087
24	0.7618	0.6947	0.7369	15.28	5	0.6432	2	0.0854	0.0096	20.02	7	0.7286	0.0096
26	0.8459	0.7782	0.8178	15.63	6	0.7766	1	0.0321	0.0105	20.11	7	0.8086	0.0105
28	0.9337	0.8647	0.9021	15.95	6	0.8572	1	0.0349	0.0113	20.18	7	0.8920	0.0113
30	1.0250	0.9542	0.9897	16.22	6	0.9410	1	0.0377	0.0122	20.25	7	0.9787	0.0122
32	1.1198	1.0468	1.0806	16.47	6	1.0280	1	0.0406	0.0132	20.32	7	1.0685	0.0132
34	1.2180	1.1423	1.1746	16.69	6	1.1181	1	0.0435	0.0141	20.38	7	1.1616	0.0141
36	1.3197	1.2409	1.2719	16.89	6	1.2113	1	0.0466	0.0151	20.43	7	1.2578	0.0151
38	1.4248	1.3424	1.3722	17.07	6	1.3076	1	0.0496	0.0160	20.48	7	1.3572	0.0160
40	1.5332	1.4470	1.4757	17.24	6	1.4069	1	0.0528	0.0170	20.53	7	1.4596	0.0170
42	1.6450	1.5545	1.5822	17.39	6	1.5092	1	0.0559	0.0181	20.57	7	1.5651	0.0181
44	1.7601	1.6651	1.6918	17.54	6	1.6145	1	0.0592	0.0191	20.61	7	1.6737	0.0191
46	1.8786	1.7785	1.8045	17.67	6	1.7227	2	0.0817	0.0010	20.65	8	1.8044	0.0010
48	2.0003	1.8950	1.9201	17.79	6	1.8339	2	0.0860	0.0010	20.68	8	1.9200	0.0010
50	2.1253	2.0143	2.0387	17.91	6	1.9481	2	0.0905	0.0011	20.72	8	2.0385	0.0011
52	2.2536	2.1368	2.1604	18.01	6	2.0651	2	0.0950	0.0011	20.75	8	2.1601	0.0011

Red Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.2789		0.2698				7	0.2678	0.0042	18.90	7	0.2678	0.0042
0.3359		0.3252				7	0.3223	0.0049	19.16	7	0.3223	0.0049
0.3970	0.0571	0.3845				7	0.3807	0.0056	19.36	7	0.3807	0.0056
0.4622	0.2276	0.4477	6.70	2	0.1851	5	0.2579	0.0063	19.54	7	0.4430	0.0063
0.5314	0.3417	0.5146	8.96	3	0.3071	4	0.2020	0.0071	19.68	7	0.5091	0.0071
0.6044	0.4372	0.5852	10.36	3	0.3521	4	0.2267	0.0079	19.81	7	0.5787	0.0079
0.6812	0.5278	0.6593	11.35	4	0.4983	3	0.1537	0.0087	19.92	7	0.6519	0.0087
0.7618	0.6175	0.7369	12.13	4	0.5592	3	0.1694	0.0096	20.02	7	0.7286	0.0096
0.8459	0.7079	0.8178	12.76	4	0.6231	3	0.1855	0.0105	20.11	7	0.8086	0.0105
0.9337	0.7998	0.9021	13.29	5	0.7905	2	0.1016	0.0113	20.18	7	0.8920	0.0113
1.0250	0.8938	0.9897	13.75	5	0.8687	2	0.1099	0.0122	20.25	7	0.9787	0.0122
1.1198	0.9901	1.0806	14.14	5	0.9500	2	0.1185	0.0132	20.32	7	1.0685	0.0132
1.2180	1.0888	1.1746	14.49	5	1.0344	2	0.1273	0.0141	20.38	7	1.1616	0.0141
1.3197	1.1902	1.2719	14.81	5	1.1216	2	0.1362	0.0151	20.43	7	1.2578	0.0151
1.4248	1.2941	1.3722	15.09	5	1.2119	2	0.1453	0.0160	20.48	7	1.3572	0.0160
1.5332	1.4009	1.4757	15.34	5	1.3050	2	0.1546	0.0170	20.53	7	1.4596	0.0170
1.6450	1.5103	1.5822	15.58	6	1.5092	1	0.0559	0.0181	20.57	7	1.5651	0.0181
1.7601	1.6226	1.6916	15.79	6	1.6145	1	0.0592	0.0191	20.61	7	1.6737	0.0191
1.8786	1.7376	1.8045	15.99	6	1.7227	2	0.0817	0.0010	20.65	8	1.8044	0.0010
2.0003	1.8555	1.9201	16.17	6	1.8339	2	0.0860	0.0010	20.68	8	1.9200	0.0010
2.1253	1.9762	2.0387	16.34	6	1.9481	2	0.0905	0.0011	20.72	8	2.0385	0.0011
2.2536	2.0997	2.1604	16.49	6	2.0651	2	0.0950	0.0011	20.75	8	2.1601	0.0011

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.2789		0.2698				7	0.2678	0.0042	18.90	7	0.2678	0.0042
0.3359		0.3252				7	0.3223	0.0049	19.16	7	0.3223	0.0049
0.3970		0.3845				7	0.3807	0.0056	19.36	7	0.3807	0.0056
0.4622		0.4477				7	0.4430	0.0063	19.54	7	0.4430	0.0063
0.5314	0.0064	0.5146				7	0.5091	0.0071	19.68	7	0.5091	0.0071
0.6044	0.1122	0.5852				7	0.5787	0.0079	19.81	7	0.5787	0.0079
0.6812	0.2767	0.6593	5.25	1	0.1520	6	0.4999	0.0087	19.92	7	0.6519	0.0087
0.7618	0.4230	0.7369	7.38	2	0.3200	5	0.4086	0.0096	20.02	7	0.7286	0.0096
0.8459	0.5468	0.8178	8.79	3	0.5027	4	0.3060	0.0105	20.11	7	0.8086	0.0105
0.9337	0.6597	0.9021	9.82	3	0.5580	4	0.3340	0.0113	20.18	7	0.8920	0.0113
1.0250	0.7684	0.9897	10.64	4	0.7595	3	0.2191	0.0122	20.25	7	0.9787	0.0122
1.1198	0.8759	1.0806	11.31	4	0.8320	3	0.2365	0.0132	20.32	7	1.0685	0.0132
1.2180	0.9835	1.1746	11.88	4	0.9073	3	0.2543	0.0141	20.38	7	1.1616	0.0141
1.3197	1.0921	1.2719	12.37	4	0.9853	3	0.2725	0.0151	20.43	7	1.2578	0.0151
1.4248	1.2021	1.3722	12.80	4	1.0661	3	0.2911	0.0160	20.48	7	1.3572	0.0160
1.5332	1.3140	1.4757	13.18	5	1.3050	2	0.1546	0.0170	20.53	7	1.4596	0.0170
1.6450	1.4279	1.5822	13.52	5	1.4010	2	0.1641	0.0181	20.57	7	1.5651	0.0181
1.7601	1.5441	1.6916	13.83	5	1.4999	2	0.1737	0.0191	20.61	7	1.6737	0.0191
1.8786	1.6626	1.8045	14.12	5	1.6017	3	0.2027	0.0010	20.65	8	1.8044	0.0010
2.0003	1.7836	1.9201	14.37	5	1.7062	3	0.2137	0.0010	20.68	8	1.9200	0.0010
2.1253	1.9071	2.0387	14.61	5	1.8136	3	0.2249	0.0011	20.72	8	2.0385	0.0011
2.2536	2.0332	2.1604	14.83	5	1.9238	3	0.2363	0.0011	20.75	8	2.1601	0.0011

Red Pine Sawlog and Pulp Volume Estimates

22 metre

Total Height - 22 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
18	0.2789	0.2515	0.2698	15.03	5	0.2320	2	0.0358	0.0042	18.90	7	0.2678	0.0042
20	0.3359	0.3090	0.3252	15.71	6	0.3076	1	0.0147	0.0049	19.16	7	0.3223	0.0049
22	0.3970	0.3699	0.3845	16.24	6	0.3638	1	0.0169	0.0056	19.36	7	0.3807	0.0056
24	0.4622	0.4344	0.4477	16.67	6	0.4238	1	0.0193	0.0063	19.54	7	0.4430	0.0063
26	0.5314	0.5023	0.5146	17.03	6	0.4874	1	0.0217	0.0071	19.68	7	0.5091	0.0071
28	0.6044	0.5737	0.5852	17.33	6	0.5546	1	0.0242	0.0079	19.81	7	0.5787	0.0079
30	0.6812	0.6485	0.6593	17.59	6	0.6252	1	0.0267	0.0087	19.92	7	0.6519	0.0087
32	0.7618	0.7266	0.7369	17.82	6	0.6992	1	0.0294	0.0096	20.02	7	0.7286	0.0096
34	0.8459	0.8081	0.8178	18.01	6	0.7766	1	0.0321	0.0105	20.11	7	0.8086	0.0105
36	0.9337	0.8929	0.9021	18.19	7	0.8920	0	0.0000	0.0113	20.18	7	0.8920	0.0113
38	1.0250	0.9809	0.9897	18.35	7	0.9787	0	0.0000	0.0122	20.25	7	0.9787	0.0122
40	1.1198	1.0721	1.0806	18.49	7	1.0685	0	0.0000	0.0132	20.32	7	1.0685	0.0132
42	1.2180	1.1665	1.1746	18.62	7	1.1616	0	0.0000	0.0141	20.38	7	1.1616	0.0141
44	1.3197	1.2641	1.2719	18.74	7	1.2578	0	0.0000	0.0151	20.43	7	1.2578	0.0151
46	1.4248	1.3647	1.3722	18.85	7	1.3572	0	0.0000	0.0160	20.48	7	1.3572	0.0160
48	1.5332	1.4684	1.4757	18.95	7	1.4596	0	0.0000	0.0170	20.53	7	1.4596	0.0170
50	1.6450	1.5752	1.5822	19.04	7	1.5651	0	0.0000	0.0181	20.57	7	1.5651	0.0181
52	1.7601	1.6850	1.6918	19.13	7	1.6737	0	0.0000	0.0191	20.61	7	1.6737	0.0191
54	1.8786	1.7978	1.8045	19.21	7	1.7852	1	0.0192	0.0010	20.65	8	1.8044	0.0010
56	2.0003	1.9137	1.9201	19.29	7	1.8998	1	0.0202	0.0010	20.68	8	1.9200	0.0010
58	2.1253	2.0325	2.0387	19.36	7	2.0173	1	0.0212	0.0011	20.72	8	2.0385	0.0011
60	2.2536	2.1543	2.1604	19.42	7	2.1378	1	0.0223	0.0011	20.75	8	2.1601	0.0011

Total Height - 22 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
18	0.2789	0.1648	0.2698	8.45	3	0.1552	4	0.1125	0.0042	18.90	7	0.2678	0.0042
20	0.3359	0.2450	0.3252	10.74	4	0.2399	3	0.0824	0.0049	19.16	7	0.3223	0.0049
22	0.3970	0.3169	0.3845	12.09	4	0.2852	3	0.0956	0.0056	19.36	7	0.3807	0.0056
24	0.4622	0.3884	0.4477	13.05	5	0.3875	2	0.0556	0.0063	19.54	7	0.4430	0.0063
26	0.5314	0.4612	0.5146	13.78	5	0.4464	2	0.0627	0.0071	19.68	7	0.5091	0.0071
28	0.6044	0.5364	0.5852	14.37	5	0.5087	2	0.0700	0.0079	19.81	7	0.5787	0.0079
30	0.6812	0.6141	0.6593	14.86	5	0.5744	2	0.0776	0.0087	19.92	7	0.6519	0.0087
32	0.7618	0.6947	0.7369	15.28	5	0.6432	2	0.0854	0.0096	20.02	7	0.7286	0.0096
34	0.8459	0.7782	0.8178	15.63	6	0.7766	1	0.0321	0.0105	20.11	7	0.8086	0.0105
36	0.9337	0.8647	0.9021	15.95	6	0.8572	1	0.0349	0.0113	20.18	7	0.8920	0.0113
38	1.0250	0.9542	0.9897	16.22	6	0.9410	1	0.0377	0.0122	20.25	7	0.9787	0.0122
40	1.1198	1.0468	1.0806	16.47	6	1.0280	1	0.0406	0.0132	20.32	7	1.0685	0.0132
42	1.2180	1.1423	1.1746	16.69	6	1.1181	1	0.0435	0.0141	20.38	7	1.1616	0.0141
44	1.3197	1.2409	1.2719	16.89	6	1.2113	1	0.0466	0.0151	20.43	7	1.2578	0.0151
46	1.4248	1.3424	1.3722	17.07	6	1.3076	1	0.0496	0.0160	20.48	7	1.3572	0.0160
48	1.5332	1.4470	1.4757	17.24	6	1.4069	1	0.0528	0.0170	20.53	7	1.4596	0.0170
50	1.6450	1.5545	1.5822	17.39	6	1.5092	1	0.0559	0.0181	20.57	7	1.5651	0.0181
52	1.7601	1.6651	1.6918	17.54	6	1.6145	1	0.0592	0.0191	20.61	7	1.6737	0.0191
54	1.8786	1.7785	1.8045	17.67	6	1.7227	2	0.0817	0.0010	20.65	8	1.8044	0.0010
56	2.0003	1.8950	1.9201	17.79	6	1.8339	2	0.0860	0.0010	20.68	8	1.9200	0.0010
58	2.1253	2.0143	2.0387	17.91	6	1.9481	2	0.0905	0.0011	20.72	8	2.0385	0.0011
60	2.2536	2.1366	2.1604	18.01	6	2.0651	2	0.0950	0.0011	20.75	8	2.1601	0.0011

Red Pine Sawlog and Pulp Volume Estimates

22 metre

Total Height - 22 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
18	0.2789		0.2698				7	0.2678	0.0042	18.90	7	0.2678	0.0042
20	0.3359		0.3252				7	0.3223	0.0049	19.16	7	0.3223	0.0049
22	0.3970	0.0571	0.3845				7	0.3807	0.0056	19.36	7	0.3807	0.0056
24	0.4622	0.2276	0.4477	6.70	2	0.1851	5	0.2579	0.0063	19.54	7	0.4430	0.0063
26	0.5314	0.3417	0.5146	8.98	3	0.3071	4	0.2020	0.0071	19.68	7	0.5091	0.0071
28	0.6044	0.4372	0.5852	10.36	3	0.3521	4	0.2267	0.0079	19.81	7	0.5787	0.0079
30	0.6812	0.5278	0.6593	11.35	4	0.4983	3	0.1537	0.0087	19.92	7	0.6519	0.0087
32	0.7618	0.6175	0.7369	12.13	4	0.5592	3	0.1694	0.0096	20.02	7	0.7286	0.0096
34	0.8459	0.7079	0.8178	12.76	4	0.6231	3	0.1855	0.0105	20.11	7	0.8086	0.0105
36	0.9337	0.7998	0.9021	13.29	5	0.7905	2	0.1016	0.0113	20.18	7	0.8920	0.0113
38	1.0250	0.8938	0.9897	13.75	5	0.8687	2	0.1099	0.0122	20.25	7	0.9787	0.0122
40	1.1198	0.9901	1.0806	14.14	5	0.9500	2	0.1185	0.0132	20.32	7	1.0685	0.0132
42	1.2180	1.0888	1.1746	14.49	5	1.0344	2	0.1273	0.0141	20.38	7	1.1616	0.0141
44	1.3197	1.1902	1.2719	14.81	5	1.1216	2	0.1362	0.0151	20.43	7	1.2578	0.0151
46	1.4248	1.2941	1.3722	15.09	5	1.2119	2	0.1453	0.0160	20.48	7	1.3572	0.0160
48	1.5332	1.4009	1.4757	15.34	5	1.3050	2	0.1546	0.0170	20.53	7	1.4596	0.0170
50	1.6450	1.5103	1.5822	15.58	6	1.5092	1	0.0559	0.0181	20.57	7	1.5651	0.0181
52	1.7601	1.6226	1.6918	15.79	6	1.6145	1	0.0592	0.0191	20.61	7	1.6737	0.0191
54	1.8786	1.7376	1.8045	15.99	6	1.7227	2	0.0817	0.0010	20.65	8	1.8044	0.0010
56	2.0003	1.8555	1.9201	16.17	6	1.8339	2	0.0860	0.0010	20.68	8	1.9200	0.0010
58	2.1253	1.9762	2.0387	16.34	6	1.9481	2	0.0905	0.0011	20.72	8	2.0385	0.0011
60	2.2536	2.0997	2.1604	16.49	6	2.0651	2	0.0950	0.0011	20.75	8	2.1601	0.0011

Total Height - 22 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
18	0.2789		0.2698				7	0.2678	0.0042	18.90	7	0.2678	0.0042
20	0.3359		0.3252				7	0.3223	0.0049	19.16	7	0.3223	0.0049
22	0.3970		0.3845				7	0.3807	0.0056	19.36	7	0.3807	0.0056
24	0.4622		0.4477				7	0.4430	0.0063	19.54	7	0.4430	0.0063
26	0.5314	0.0064	0.5146				7	0.5091	0.0071	19.68	7	0.5091	0.0071
28	0.6044	0.1122	0.5852				7	0.5787	0.0079	19.81	7	0.5787	0.0079
30	0.6812	0.2767	0.6593	5.25	1	0.1520	6	0.4999	0.0087	19.92	7	0.6519	0.0087
32	0.7618	0.4239	0.7369	7.38	2	0.3200	5	0.4086	0.0096	20.02	7	0.7286	0.0096
34	0.8459	0.5468	0.8178	8.79	3	0.5027	4	0.3060	0.0105	20.11	7	0.8086	0.0105
36	0.9337	0.6597	0.9021	9.82	3	0.5580	4	0.3340	0.0113	20.18	7	0.8920	0.0113
38	1.0250	0.7684	0.9897	10.64	4	0.7595	3	0.2191	0.0122	20.25	7	0.9787	0.0122
40	1.1198	0.8759	1.0806	11.31	4	0.8320	3	0.2365	0.0132	20.32	7	1.0685	0.0132
42	1.2180	0.9835	1.1746	11.88	4	0.9073	3	0.2543	0.0141	20.38	7	1.1616	0.0141
44	1.3197	1.0921	1.2719	12.37	4	0.9853	3	0.2725	0.0151	20.43	7	1.2578	0.0151
46	1.4248	1.2021	1.3722	12.80	4	1.0661	3	0.2911	0.0160	20.48	7	1.3572	0.0160
48	1.5332	1.3140	1.4757	13.18	5	1.3050	2	0.1546	0.0170	20.53	7	1.4596	0.0170
50	1.6450	1.4279	1.5822	13.52	5	1.4010	2	0.1641	0.0181	20.57	7	1.5651	0.0181
52	1.7601	1.5441	1.6918	13.83	5	1.4999	2	0.1737	0.0191	20.61	7	1.6737	0.0191
54	1.8786	1.6626	1.8045	14.12	5	1.6017	3	0.2027	0.0010	20.65	8	1.8044	0.0010
56	2.0003	1.7836	1.9201	14.37	5	1.7062	3	0.2137	0.0010	20.68	8	1.9200	0.0010
58	2.1253	1.9071	2.0387	14.61	5	1.8136	3	0.2249	0.0011	20.72	8	2.0385	0.0011
60	2.2536	2.0332	2.1604	14.83	5	1.9238	3	0.2363	0.0011	20.75	8	2.1601	0.0011

Red Pine Sawlog and Pulp Volume Estimates

22 metre

Total Height - 22 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
18	0.2789		0.2698				7	0.2678	0.0042	18.90	7	0.2678	0.0042
20	0.3359		0.3252				7	0.3223	0.0049	19.16	7	0.3223	0.0049
22	0.3970		0.3845				7	0.3807	0.0056	19.36	7	0.3807	0.0056
24	0.4622		0.4477				7	0.4430	0.0063	19.54	7	0.4430	0.0063
26	0.5314		0.5146				7	0.5091	0.0071	19.68	7	0.5091	0.0071
28	0.6044		0.5852				7	0.5787	0.0079	19.81	7	0.5787	0.0079
30	0.6812		0.6593				7	0.6519	0.0087	19.92	7	0.6519	0.0087
32	0.7618	0.0549	0.7369				7	0.7286	0.0096	20.02	7	0.7286	0.0096
34	0.8459	0.1706	0.8178				7	0.8086	0.0105	20.11	7	0.8086	0.0105
36	0.9337	0.3255	0.9021	4.30	1	0.2183	6	0.6738	0.0113	20.18	7	0.8920	0.0113
38	1.0250	0.4894	0.9897	6.02	2	0.4430	5	0.5356	0.0122	20.25	7	0.9787	0.0122
40	1.1198	0.6389	1.0806	7.38	2	0.4881	5	0.5804	0.0132	20.32	7	1.0685	0.0132
42	1.2180	0.7761	1.1746	8.43	3	0.7392	4	0.4224	0.0141	20.38	7	1.1616	0.0141
44	1.3197	0.9064	1.2719	9.28	3	0.8046	4	0.4533	0.0151	20.43	7	1.2578	0.0151
46	1.4248	1.0330	1.3722	9.98	3	0.8723	4	0.4849	0.0160	20.48	7	1.3572	0.0160
48	1.5332	1.1580	1.4757	10.58	4	1.1496	3	0.3101	0.0170	20.53	7	1.4596	0.0170
50	1.6450	1.2827	1.5822	11.10	4	1.2358	3	0.3294	0.0181	20.57	7	1.5651	0.0181
52	1.7601	1.4079	1.6918	11.56	4	1.3246	3	0.3491	0.0191	20.61	7	1.6737	0.0191
54	1.8786	1.5341	1.8045	11.97	4	1.4161	4	0.3883	0.0010	20.65	8	1.8044	0.0010
56	2.0003	1.6617	1.9201	12.34	4	1.5103	4	0.4097	0.0010	20.68	8	1.9200	0.0010
58	2.1253	1.7910	2.0387	12.67	4	1.6071	4	0.4315	0.0011	20.72	8	2.0385	0.0011
60	2.2536	1.9222	2.1604	12.98	4	1.7065	4	0.4536	0.0011	20.75	8	2.1601	0.0011

Total Height - 22 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
18	0.2789		0.2698				7	0.2678	0.0042	18.90	7	0.2678	0.0042
20	0.3359		0.3252				7	0.3223	0.0049	19.16	7	0.3223	0.0049
22	0.3970		0.3845				7	0.3807	0.0056	19.36	7	0.3807	0.0056
24	0.4622		0.4477				7	0.4430	0.0063	19.54	7	0.4430	0.0063
26	0.5314		0.5146				7	0.5091	0.0071	19.68	7	0.5091	0.0071
28	0.6044		0.5852				7	0.5787	0.0079	19.81	7	0.5787	0.0079
30	0.6812		0.6593				7	0.6519	0.0087	19.92	7	0.6519	0.0087
32	0.7618		0.7369				7	0.7286	0.0096	20.02	7	0.7286	0.0096
34	0.8459		0.8178				7	0.8086	0.0105	20.11	7	0.8086	0.0105
36	0.9337	0.0185	0.9021				7	0.8920	0.0113	20.18	7	0.8920	0.0113
38	1.0250	0.1133	0.9897				7	0.9787	0.0122	20.25	7	0.9787	0.0122
40	1.1198	0.2342	1.0806				7	1.0685	0.0132	20.32	7	1.0685	0.0132
42	1.2180	0.3827	1.1746	3.71	1	0.2964	6	0.8653	0.0141	20.38	7	1.1616	0.0141
44	1.3197	0.5485	1.2719	5.00	1	0.3250	6	0.9328	0.0151	20.43	7	1.2578	0.0151
46	1.4248	0.7149	1.3722	6.18	2	0.6355	5	0.7217	0.0160	20.48	7	1.3572	0.0160
48	1.5332	0.8742	1.4757	7.19	2	0.6886	5	0.7710	0.0170	20.53	7	1.4596	0.0170
50	1.6450	1.0264	1.5822	8.04	3	1.0151	4	0.5500	0.0181	20.57	7	1.5651	0.0181
52	1.7601	1.1735	1.6918	8.76	3	1.0901	4	0.5836	0.0191	20.61	7	1.6737	0.0191
54	1.8786	1.3176	1.8045	9.38	3	1.1675	5	0.6369	0.0010	20.65	8	1.8044	0.0010
56	2.0003	1.4599	1.9201	9.92	3	1.2472	5	0.6728	0.0010	20.68	8	1.9200	0.0010
58	2.1253	1.6017	2.0387	10.40	3	1.3293	5	0.7093	0.0011	20.72	8	2.0385	0.0011
60	2.2536	1.7436	2.1604	10.84	4	1.7065	4	0.4536	0.0011	20.75	8	2.1601	0.0011

Red Pine Sawlog and Pulp Volume Estimates

24 metre

Total Height - 24 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3721	0.3442	0.3614	17.29	6	0.3275	2	0.0332	0.0028	20.96	8	0.3607	0.0028
22	0.4399	0.4118	0.4274	17.86	6	0.3877	2	0.0384	0.0032	21.19	8	0.4261	0.0032
24	0.5120	0.4834	0.4976	18.32	7	0.4814	1	0.0143	0.0037	21.37	8	0.4957	0.0037
26	0.5885	0.5588	0.5719	18.70	7	0.5534	1	0.0161	0.0041	21.53	8	0.5695	0.0041
28	0.6693	0.6379	0.6502	19.02	7	0.6293	1	0.0179	0.0046	21.66	8	0.6472	0.0046
30	0.7541	0.7208	0.7324	19.30	7	0.7090	1	0.0198	0.0051	21.78	8	0.7288	0.0051
32	0.8429	0.8074	0.8183	19.53	7	0.7924	1	0.0217	0.0055	21.88	8	0.8142	0.0055
34	0.9356	0.8976	0.9079	19.75	7	0.8795	1	0.0237	0.0060	21.98	8	0.9032	0.0060
36	1.0322	0.9913	1.0012	19.93	7	0.9702	1	0.0257	0.0066	22.06	8	0.9959	0.0066
38	1.1325	1.0885	1.0980	20.10	7	1.0643	1	0.0278	0.0071	22.13	8	1.0921	0.0071
40	1.2366	1.1892	1.1982	20.25	7	1.1619	1	0.0299	0.0076	22.20	8	1.1919	0.0076
42	1.3444	1.2933	1.3020	20.39	7	1.2629	1	0.0321	0.0081	22.27	8	1.2950	0.0081
44	1.4559	1.4008	1.4091	20.52	7	1.3673	1	0.0343	0.0087	22.32	8	1.4016	0.0087
46	1.5709	1.5115	1.5196	20.63	8	1.5114			0.0092	22.38	8	1.5114	0.0092
48	1.6895	1.6256	1.6334	20.74	8	1.6246			0.0098	22.42	8	1.6246	0.0098
50	1.8116	1.7429	1.7505	20.84	8	1.7411			0.0104	22.47	8	1.7411	0.0104
52	1.9372	1.8635	1.8708	20.93	8	1.8608			0.0110	22.51	8	1.8608	0.0110
54	2.0663	1.9872	1.9943	21.01	8	1.9837			0.0115	22.55	8	1.9837	0.0115
56	2.1989	2.1142	2.1210	21.09	8	2.1098			0.0121	22.59	8	2.1098	0.0121
58	2.3349	2.2442	2.2509	21.17	8	2.2391			0.0128	22.62	8	2.2391	0.0128
60	2.4743	2.3775	2.3840	21.24	8	2.3715			0.0134	22.66	8	2.3715	0.0134

Total Height - 24 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3721	0.2764	0.3614	12.03	4	0.2468	4	0.1139	0.0028	20.96	8	0.3607	0.0028
22	0.4399	0.3556	0.4274	13.45	5	0.3474	3	0.0787	0.0032	21.19	8	0.4261	0.0032
24	0.5120	0.4345	0.4976	14.46	5	0.4059	3	0.0899	0.0037	21.37	8	0.4957	0.0037
26	0.5885	0.5151	0.5719	15.24	5	0.4680	3	0.1015	0.0041	21.53	8	0.5695	0.0041
28	0.6693	0.5982	0.6502	15.87	6	0.5922	2	0.0550	0.0046	21.66	8	0.6472	0.0046
30	0.7541	0.6842	0.7324	16.39	6	0.6679	2	0.0609	0.0051	21.78	8	0.7288	0.0051
32	0.8429	0.7734	0.8183	16.83	6	0.7472	2	0.0669	0.0055	21.88	8	0.8142	0.0055
34	0.9356	0.8657	0.9079	17.21	6	0.8301	2	0.0731	0.0060	21.98	8	0.9032	0.0060
36	1.0322	0.9613	1.0012	17.54	6	0.9165	2	0.0795	0.0066	22.06	8	0.9959	0.0066
38	1.1325	1.0601	1.0980	17.83	6	1.0062	2	0.0859	0.0071	22.13	8	1.0921	0.0071
40	1.2366	1.1621	1.1982	18.09	7	1.1619	1	0.0299	0.0076	22.20	8	1.1919	0.0076
42	1.3444	1.2675	1.3020	18.33	7	1.2629	1	0.0321	0.0081	22.27	8	1.2950	0.0081
44	1.4559	1.3760	1.4091	18.54	7	1.3673	1	0.0343	0.0087	22.32	8	1.4016	0.0087
46	1.5709	1.4878	1.5196	18.73	7	1.4750	1	0.0365	0.0092	22.38	8	1.5114	0.0092
48	1.6895	1.6027	1.6334	18.91	7	1.5859	1	0.0388	0.0098	22.42	8	1.6246	0.0098
50	1.8116	1.7209	1.7505	19.07	7	1.7001	1	0.0411	0.0104	22.47	8	1.7411	0.0104
52	1.9372	1.8421	1.8708	19.22	7	1.8174	1	0.0434	0.0110	22.51	8	1.8608	0.0110
54	2.0663	1.9666	1.9943	19.36	7	1.9380	1	0.0458	0.0115	22.55	8	1.9837	0.0115
56	2.1989	2.0941	2.1210	19.49	7	2.0617	1	0.0482	0.0121	22.59	8	2.1098	0.0121
58	2.3349	2.2248	2.2509	19.61	7	2.1885	1	0.0506	0.0128	22.62	8	2.2391	0.0128
60	2.4743	2.3586	2.3840	19.73	7	2.3184	1	0.0531	0.0134	22.66	8	2.3715	0.0134

Red Pine Sawlog and Pulp Volume Estimates

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.2789		0.2698				7	0.2678	0.0042	18.90	7	0.2678	0.0042
11	0.3359		0.3252				7	0.3223	0.0049	19.16	7	0.3223	0.0049
12	0.3970		0.3845				7	0.3807	0.0056	19.36	7	0.3807	0.0056
13	0.4622		0.4477				7	0.4430	0.0063	19.54	7	0.4430	0.0063
14	0.5314		0.5146				7	0.5091	0.0071	19.69	7	0.5091	0.0071
15	0.6044		0.5852				7	0.5787	0.0079	19.81	7	0.5787	0.0079
16	0.6812		0.6593				7	0.6519	0.0087	19.92	7	0.6519	0.0087
17	0.7618	0.0549	0.7369				7	0.7286	0.0096	20.02	7	0.7286	0.0096
18	0.8459	0.1706	0.8178				7	0.8086	0.0105	20.11	7	0.8086	0.0105
19	0.9337	0.3255	0.9021	4.30	1	0.2183	6	0.6738	0.0113	20.18	7	0.8920	0.0113
20	1.0250	0.4894	0.9897	6.02	2	0.4430	5	0.5356	0.0122	20.25	7	0.9787	0.0122
21	1.1198	0.6369	1.0806	7.38	2	0.4881	5	0.5804	0.0132	20.32	7	1.0685	0.0132
22	1.2180	0.7761	1.1746	8.43	3	0.7392	4	0.4224	0.0141	20.38	7	1.1616	0.0141
23	1.3197	0.9064	1.2719	9.28	3	0.8046	4	0.4533	0.0151	20.43	7	1.2578	0.0151
24	1.4248	1.0330	1.3722	9.96	3	0.8723	4	0.4849	0.0160	20.48	7	1.3572	0.0160
25	1.5332	1.1580	1.4757	10.58	4	1.1496	3	0.3101	0.0170	20.53	7	1.4596	0.0170
26	1.6450	1.2827	1.5822	11.10	4	1.2358	3	0.3294	0.0181	20.57	7	1.5651	0.0181
27	1.7601	1.4079	1.6918	11.56	4	1.3246	3	0.3491	0.0191	20.61	7	1.6737	0.0191
28	1.8786	1.5341	1.8045	11.97	4	1.4161	4	0.3683	0.0010	20.65	8	1.8044	0.0010
29	2.0003	1.6617	1.9201	12.34	4	1.5103	4	0.4097	0.0010	20.68	8	1.9200	0.0010
30	2.1253	1.7910	2.0387	12.67	4	1.6071	4	0.4315	0.0011	20.72	8	2.0385	0.0011
31	2.2536	1.9222	2.1604	12.98	4	1.7065		0.4536	0.0011	20.75	8	2.1601	0.0011

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
10	0.2789		0.2698				7	0.2678	0.0042	18.90	7	0.2678	0.0042
11	0.3359		0.3252				7	0.3223	0.0049	19.16	7	0.3223	0.0049
12	0.3970		0.3845				7	0.3807	0.0056	19.36	7	0.3807	0.0056
13	0.4622		0.4477				7	0.4430	0.0063	19.54	7	0.4430	0.0063
14	0.5314		0.5146				7	0.5091	0.0071	19.68	7	0.5091	0.0071
15	0.6044		0.5852				7	0.5787	0.0079	19.81	7	0.5787	0.0079
16	0.6812		0.6593				7	0.6519	0.0087	19.92	7	0.6519	0.0087
17	0.7618		0.7369				7	0.7286	0.0096	20.02	7	0.7286	0.0096
18	0.8459		0.8178				7	0.8086	0.0105	20.11	7	0.8086	0.0105
19	0.9337	0.0185	0.9021				7	0.8920	0.0113	20.18	7	0.8920	0.0113
20	1.0250	0.1133	0.9897				7	0.9787	0.0122	20.25	7	0.9787	0.0122
21	1.1198	0.2342	1.0806				7	1.0685	0.0132	20.32	7	1.0685	0.0132
22	1.2180	0.3627	1.1746	3.71	1	0.2964	6	0.8653	0.0141	20.38	7	1.1616	0.0141
23	1.3197	0.5485	1.2719	5.00	1	0.3250	6	0.9328	0.0151	20.43	7	1.2578	0.0151
24	1.4248	0.7149	1.3722	6.18	2	0.6355	5	0.7217	0.0160	20.48	7	1.3572	0.0160
25	1.5332	0.8742	1.4757	7.19	2	0.6886	5	0.7710	0.0170	20.53	7	1.4596	0.0170
26	1.6450	1.0284	1.5822	8.04	3	1.0151	4	0.5500	0.0181	20.57	7	1.5651	0.0181
27	1.7601	1.1735	1.6918	8.76	3	1.0901	4	0.5836	0.0191	20.61	7	1.6737	0.0191
28	1.8786	1.3176	1.8045	9.38	3	1.1675	5	0.6369	0.0010	20.65	8	1.8044	0.0010
29	2.0003	1.4599	1.9201	9.92	3	1.2472	5	0.6728	0.0010	20.68	8	1.9200	0.0010
30	2.1253	1.6017	2.0387	10.40	3	1.3293	5	0.7093	0.0011	20.72	8	2.0385	0.0011
31	2.2536	1.7436	2.1604	10.84	4	1.7065	4	0.4536	0.0011	20.75	8	2.1601	0.0011

Red Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.3721	0.3442	0.3614	17.29	6	0.3275	2	0.0332	0.0028	20.96	8	0.3607	0.0028
0.4399	0.4118	0.4274	17.86	6	0.3877	2	0.0384	0.0032	21.19	8	0.4261	0.0032
0.5120	0.4834	0.4976	18.32	7	0.4814	1	0.0143	0.0037	21.37	8	0.4957	0.0037
0.5885	0.5588	0.5719	18.70	7	0.5534	1	0.0161	0.0041	21.53	8	0.5695	0.0041
0.6693	0.6379	0.6502	19.02	7	0.6293	1	0.0179	0.0046	21.66	8	0.6472	0.0046
0.7541	0.7208	0.7324	19.30	7	0.7090	1	0.0198	0.0051	21.78	8	0.7288	0.0051
0.8429	0.8074	0.8183	19.53	7	0.7924	1	0.0217	0.0055	21.88	8	0.8142	0.0055
0.9356	0.8976	0.9079	19.75	7	0.8795	1	0.0237	0.0060	21.98	8	0.9032	0.0060
1.0322	0.9913	1.0012	19.93	7	0.9702	1	0.0257	0.0066	22.06	8	0.9959	0.0066
1.1325	1.0885	1.0980	20.10	7	1.0643	1	0.0278	0.0071	22.13	8	1.0921	0.0071
1.2366	1.1892	1.1982	20.25	7	1.1619	1	0.0299	0.0076	22.20	8	1.1919	0.0076
1.3444	1.2933	1.3020	20.39	7	1.2629	1	0.0321	0.0081	22.27	8	1.2950	0.0081
1.4559	1.4008	1.4091	20.52	7	1.3673	1	0.0343	0.0087	22.32	8	1.4016	0.0087
1.5709	1.5115	1.5196	20.63	8	1.5114			0.0092	22.38	8	1.5114	0.0092
1.6895	1.6256	1.6334	20.74	8	1.6246			0.0098	22.42	8	1.6246	0.0098
1.8116	1.7429	1.7505	20.84	8	1.7411			0.0104	22.47	8	1.7411	0.0104
1.9372	1.8635	1.8708	20.93	8	1.8608			0.0110	22.51	8	1.8608	0.0110
2.0663	1.9872	1.9943	21.01	8	1.9837			0.0115	22.55	8	1.9837	0.0115
2.1989	2.1142	2.1210	21.09	8	2.1098			0.0121	22.59	8	2.1098	0.0121
2.3349	2.2442	2.2509	21.17	8	2.2391			0.0128	22.62	8	2.2391	0.0128
2.4743	2.3775	2.3840	21.24	8	2.3715			0.0134	22.66	8	2.3715	0.0134

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.3721	0.2764	0.3614	12.03	4	0.2468	4	0.1139	0.0028	20.96	8	0.3607	0.0028
0.4399	0.3556	0.4274	13.45	5	0.3474	3	0.0787	0.0032	21.19	8	0.4261	0.0032
0.5120	0.4345	0.4976	14.46	5	0.4059	3	0.0899	0.0037	21.37	8	0.4957	0.0037
0.5885	0.5151	0.5719	15.24	5	0.4680	3	0.1015	0.0041	21.53	8	0.5695	0.0041
0.6693	0.5982	0.6502	15.87	6	0.5922	2	0.0550	0.0046	21.66	8	0.6472	0.0046
0.7541	0.6842	0.7324	16.39	6	0.6679	2	0.0609	0.0051	21.78	8	0.7288	0.0051
0.8429	0.7734	0.8183	16.83	6	0.7472	2	0.0669	0.0055	21.88	8	0.8142	0.0055
0.9356	0.8657	0.9079	17.21	6	0.8301	2	0.0731	0.0060	21.98	8	0.9032	0.0060
1.0322	0.9613	1.0012	17.54	6	0.9165	2	0.0795	0.0066	22.06	8	0.9959	0.0066
1.1325	1.0601	1.0980	17.83	6	1.0062	2	0.0859	0.0071	22.13	8	1.0921	0.0071
1.2366	1.1621	1.1982	18.09	7	1.1619	1	0.0299	0.0076	22.20	8	1.1919	0.0076
1.3444	1.2675	1.3020	18.33	7	1.2629	1	0.0321	0.0081	22.27	8	1.2950	0.0081
1.4559	1.3760	1.4091	18.54	7	1.3673	1	0.0343	0.0087	22.32	8	1.4016	0.0087
1.5709	1.4878	1.5196	18.73	7	1.4750	1	0.0365	0.0092	22.38	8	1.5114	0.0092
1.6895	1.6027	1.6334	18.91	7	1.5859	1	0.0388	0.0098	22.42	8	1.6246	0.0098
1.8116	1.7209	1.7505	19.07	7	1.7001	1	0.0411	0.0104	22.47	8	1.7411	0.0104
1.9372	1.8421	1.8708	19.22	7	1.8174	1	0.0434	0.0110	22.51	8	1.8608	0.0110
2.0663	1.9666	1.9943	19.36	7	1.9380	1	0.0458	0.0115	22.55	8	1.9837	0.0115
2.1989	2.0941	2.1210	19.49	7	2.0617	1	0.0482	0.0121	22.59	8	2.1098	0.0121
2.3349	2.2248	2.2509	19.61	7	2.1885	1	0.0506	0.0128	22.62	8	2.2391	0.0128
2.4743	2.3586	2.3840	19.73	7	2.3184	1	0.0531	0.0134	22.66	8	2.3715	0.0134

Red Pine Sawlog and Pulp Volume Estimates

24 metre

Total Height - 24 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3721		0.3614				8	0.3607	0.0028	20.96	8	0.3607	0.0028
22	0.4399	0.0615	0.4274				8	0.4261	0.0032	21.19	8	0.4261	0.0032
24	0.5120	0.2652	0.4976	7.77	2	0.1869	6	0.3089	0.0037	21.37	8	0.4957	0.0037
26	0.5885	0.3887	0.5719	10.16	3	0.3132	5	0.2563	0.0041	21.53	8	0.5695	0.0041
28	0.6693	0.4930	0.6502	11.61	4	0.4550	4	0.1922	0.0046	21.66	8	0.6472	0.0046
30	0.7541	0.5926	0.7324	12.66	4	0.5152	4	0.2136	0.0051	21.78	8	0.7288	0.0051
32	0.8429	0.6913	0.8183	13.48	5	0.6757	3	0.1385	0.0055	21.88	8	0.8142	0.0055
34	0.9356	0.7909	0.9079	14.15	5	0.7517	3	0.1515	0.0060	21.98	8	0.9032	0.0060
36	1.0322	0.8922	1.0012	14.71	5	0.8311	3	0.1648	0.0066	22.06	8	0.9959	0.0066
38	1.1325	0.9957	1.0980	15.19	5	0.9137	3	0.1785	0.0071	22.13	8	1.0921	0.0071
40	1.2366	1.1017	1.1982	15.62	6	1.0993	2	0.0925	0.0076	22.20	8	1.1919	0.0076
42	1.3444	1.2104	1.3020	15.99	6	1.1958	2	0.0993	0.0081	22.27	8	1.2950	0.0081
44	1.4559	1.3219	1.4091	16.32	6	1.2954	2	0.1061	0.0087	22.32	8	1.4016	0.0087
46	1.5709	1.4362	1.5196	16.62	6	1.3983	2	0.1131	0.0092	22.38	8	1.5114	0.0092
48	1.6895	1.5534	1.6334	16.89	6	1.5044	2	0.1202	0.0098	22.42	8	1.6246	0.0098
50	1.8116	1.6736	1.7505	17.13	6	1.6137	2	0.1275	0.0104	22.47	8	1.7411	0.0104
52	1.9372	1.7967	1.8708	17.36	6	1.7260	2	0.1348	0.0110	22.51	8	1.8608	0.0110
54	2.0663	1.9229	1.9943	17.56	6	1.8415	2	0.1423	0.0115	22.55	8	1.9837	0.0115
56	2.1989	2.0519	2.1210	17.76	6	1.9600	2	0.1499	0.0121	22.59	8	2.1098	0.0121
58	2.3349	2.1840	2.2509	17.94	6	2.0815	2	0.1576	0.0128	22.62	8	2.2391	0.0128
60	2.4743	2.3191	2.3840	18.10	7	2.3184	1	0.0531	0.0134	22.66	8	2.3715	0.0134

Total Height - 24 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3721		0.3614				8	0.3607	0.0028	20.96	8	0.3607	0.0028
22	0.4399		0.4274				8	0.4261	0.0032	21.19	8	0.4261	0.0032
24	0.5120		0.4976				8	0.4957	0.0037	21.37	8	0.4957	0.0037
26	0.5885	0.0004	0.5719				8	0.5695	0.0041	21.53	8	0.5695	0.0041
28	0.6693	0.1228	0.6502				8	0.6472	0.0046	21.66	8	0.6472	0.0046
30	0.7541	0.3220	0.7324	6.10	2	0.2862	6	0.4426	0.0051	21.78	8	0.7288	0.0051
32	0.8429	0.4855	0.8183	8.44	3	0.4597	5	0.3545	0.0055	21.88	8	0.8142	0.0055
34	0.9356	0.6197	0.9079	9.93	3	0.5140	5	0.3893	0.0060	21.98	8	0.9032	0.0060
36	1.0322	0.7432	1.0012	11.03	4	0.7146	4	0.2813	0.0066	22.06	8	0.9959	0.0066
38	1.1325	0.8623	1.0980	11.89	4	0.7871	4	0.3050	0.0071	22.13	8	1.0921	0.0071
40	1.2366	0.9802	1.1982	12.60	4	0.8625	4	0.3293	0.0076	22.20	8	1.1919	0.0076
42	1.3444	1.0982	1.3020	13.20	5	1.0884	3	0.2067	0.0081	22.27	8	1.2950	0.0081
44	1.4559	1.2173	1.4091	13.72	5	1.1804	3	0.2212	0.0087	22.32	8	1.4016	0.0087
46	1.5709	1.3380	1.5196	14.17	5	1.2755	3	0.2360	0.0092	22.38	8	1.5114	0.0092
48	1.6895	1.4607	1.6334	14.58	5	1.3736	3	0.2510	0.0098	22.42	8	1.6246	0.0098
50	1.8116	1.5856	1.7505	14.94	5	1.4748	3	0.2664	0.0104	22.47	8	1.7411	0.0104
52	1.9372	1.7129	1.8708	15.27	5	1.5789	3	0.2820	0.0110	22.51	8	1.8608	0.0110
54	2.0663	1.8427	1.9943	15.56	6	1.8415	2	0.1423	0.0115	22.55	8	1.9837	0.0115
56	2.1989	1.9750	2.1210	15.84	6	1.9600	2	0.1499	0.0121	22.59	8	2.1098	0.0121
58	2.3349	2.1101	2.2509	16.09	6	2.0815	2	0.1576	0.0128	22.62	8	2.2391	0.0128
60	2.4743	2.2478	2.3840	16.32	6	2.2061	2	0.1654	0.0134	22.66	8	2.3715	0.0134

Red Pine Sawlog and Pulp Volume Estimates

24 metre

Total Height - 24 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3721		0.3614				8	0.3607	0.0028	20.96	8	0.3607	0.0028
22	0.4399		0.4274				8	0.4261	0.0032	21.19	8	0.4261	0.0032
24	0.5120		0.4976				8	0.4957	0.0037	21.37	8	0.4957	0.0037
26	0.5885		0.5719				8	0.5695	0.0041	21.53	8	0.5695	0.0041
28	0.6693		0.6502				8	0.6472	0.0046	21.66	8	0.6472	0.0046
30	0.7541		0.7324				8	0.7288	0.0051	21.78	8	0.7288	0.0051
32	0.8429	0.0517	0.8183				8	0.8142	0.0055	21.88	8	0.8142	0.0055
34	0.9356	0.1858	0.9079				8	0.9032	0.0060	21.98	8	0.9032	0.0060
36	1.0322	0.3715	1.0012	4.90	1	0.2186	7	0.7773	0.0066	22.06	8	0.9959	0.0066
38	1.1325	0.5604	1.0980	6.90	2	0.4487	6	0.6434	0.0071	22.13	8	1.0921	0.0071
40	1.2366	0.7262	1.1982	8.39	3	0.6925	5	0.4993	0.0076	22.20	8	1.1919	0.0076
42	1.3444	0.8767	1.3020	9.52	3	0.7572	5	0.5378	0.0081	22.27	8	1.2950	0.0081
44	1.4559	1.0191	1.4091	10.42	3	0.8244	5	0.5772	0.0087	22.32	8	1.4016	0.0087
46	1.5709	1.1575	1.5196	11.16	4	1.1061	4	0.4053	0.0092	22.38	8	1.5114	0.0092
48	1.6895	1.2942	1.6334	11.80	4	1.1929	4	0.4317	0.0098	22.42	8	1.6246	0.0098
50	1.8116	1.4305	1.7505	12.35	4	1.2826	4	0.4585	0.0104	22.47	8	1.7411	0.0104
52	1.9372	1.5673	1.8708	12.84	4	1.3749	4	0.4859	0.0110	22.51	8	1.8608	0.0110
54	2.0663	1.7052	1.9943	13.27	5	1.6859	3	0.2978	0.0115	22.55	8	1.9837	0.0115
56	2.1989	1.8446	2.1210	13.66	5	1.7959	3	0.3139	0.0121	22.59	8	2.1098	0.0121
58	2.3349	1.9858	2.2509	14.01	5	1.9088	3	0.3303	0.0128	22.62	8	2.2391	0.0128
60	2.4743	2.1290	2.3840	14.34	5	2.0246	3	0.3469	0.0134	22.66	8	2.3715	0.0134

Total Height - 24 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.3721		0.3614				8	0.3607	0.0028	20.96	8	0.3607	0.0028
22	0.4399		0.4274				8	0.4261	0.0032	21.19	8	0.4261	0.0032
24	0.5120		0.4976				8	0.4957	0.0037	21.37	8	0.4957	0.0037
26	0.5885		0.5719				8	0.5695	0.0041	21.53	8	0.5695	0.0041
28	0.6693		0.6502				8	0.6472	0.0046	21.66	8	0.6472	0.0046
30	0.7541		0.7324				8	0.7288	0.0051	21.78	8	0.7288	0.0051
32	0.8429		0.8183				8	0.8142	0.0055	21.88	8	0.8142	0.0055
34	0.9356		0.9079				8	0.9032	0.0060	21.98	8	0.9032	0.0060
36	1.0322	0.0074	1.0012				8	0.9959	0.0066	22.06	8	0.9959	0.0066
38	1.1325	0.1139	1.0980				8	1.0921	0.0071	22.13	8	1.0921	0.0071
40	1.2366	0.2532	1.1982				8	1.1919	0.0076	22.20	8	1.1919	0.0076
42	1.3444	0.4282	1.3020	4.15	1	0.2968	7	0.9982	0.0081	22.27	8	1.2950	0.0081
44	1.4559	0.6220	1.4091	5.69	2	0.5924	6	0.8092	0.0087	22.32	8	1.4016	0.0087
46	1.5709	0.8107	1.5196	7.03	2	0.6443	6	0.8671	0.0092	22.38	8	1.5114	0.0092
48	1.6895	0.9876	1.6334	8.14	3	0.9662	5	0.6584	0.0098	22.42	8	1.6246	0.0098
50	1.8116	1.1548	1.7505	9.06	3	1.0409	5	0.7002	0.0104	22.47	8	1.7411	0.0104
52	1.9372	1.3158	1.8708	9.83	3	1.1179	5	0.7429	0.0110	22.51	8	1.8608	0.0110
54	2.0663	1.4731	1.9943	10.49	4	1.4701	4	0.5137	0.0115	22.55	8	1.9837	0.0115
56	2.1989	1.6285	2.1210	11.07	4	1.5679	4	0.5420	0.0121	22.59	8	2.1098	0.0121
58	2.3349	1.7830	2.2509	11.58	4	1.6684	4	0.5707	0.0128	22.62	8	2.2391	0.0128
60	2.4743	1.9376	2.3840	12.04	4	1.7716	4	0.5999	0.0134	22.66	8	2.3715	0.0134

Red Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.3721		0.3614				8	0.3607	0.0028	20.96	8	0.3607	0.0028
0.4399	0.0615	0.4274				8	0.4261	0.0032	21.19	8	0.4261	0.0032
0.5120	0.2652	0.4976	7.77	2	0.1869	6	0.3089	0.0037	21.37	8	0.4957	0.0037
0.5885	0.3887	0.5719	10.16	3	0.3132	5	0.2563	0.0041	21.53	8	0.5695	0.0041
0.6693	0.4930	0.6502	11.61	4	0.4550	4	0.1922	0.0046	21.66	8	0.6472	0.0046
0.7541	0.5926	0.7324	12.66	4	0.5152	4	0.2136	0.0051	21.78	8	0.7288	0.0051
0.8429	0.6913	0.8183	13.48	5	0.6757	3	0.1385	0.0055	21.88	8	0.8142	0.0055
0.9356	0.7909	0.9079	14.15	5	0.7517	3	0.1515	0.0060	21.96	8	0.9032	0.0060
1.0322	0.8922	1.0012	14.71	5	0.8311	3	0.1648	0.0066	22.06	8	0.9959	0.0066
1.1325	0.9957	1.0980	15.19	5	0.9137	3	0.1785	0.0071	22.13	8	1.0921	0.0071
1.2366	1.1017	1.1982	15.62	6	1.0993	2	0.0925	0.0076	22.20	8	1.1919	0.0076
1.3444	1.2104	1.3020	15.99	6	1.1956	2	0.0993	0.0081	22.27	8	1.2950	0.0081
1.4559	1.3219	1.4091	16.32	6	1.2954	2	0.1061	0.0087	22.32	8	1.4016	0.0087
1.5709	1.4362	1.5196	16.62	6	1.3983	2	0.1131	0.0092	22.38	8	1.5114	0.0092
1.6895	1.5534	1.6334	16.89	6	1.5044	2	0.1202	0.0098	22.42	8	1.6246	0.0098
1.8116	1.6736	1.7505	17.13	6	1.6137	2	0.1275	0.0104	22.47	8	1.7411	0.0104
1.9372	1.7967	1.8708	17.36	6	1.7260	2	0.1348	0.0110	22.51	8	1.8608	0.0110
2.0663	1.9229	1.9943	17.56	6	1.8415	2	0.1423	0.0115	22.55	8	1.9837	0.0115
2.1989	2.0519	2.1210	17.76	6	1.9600	2	0.1499	0.0121	22.59	8	2.1098	0.0121
2.3349	2.1840	2.2509	17.94	6	2.0815	2	0.1576	0.0128	22.62	8	2.2391	0.0128
2.4743	2.3191	2.3840	18.10	7	2.3184	1	0.0531	0.0134	22.66	8	2.3715	0.0134

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.3721		0.3614				8	0.3607	0.0028	20.96	8	0.3607	0.0028
0.4399		0.4274				8	0.4261	0.0032	21.19	8	0.4261	0.0032
0.5120		0.4976				8	0.4957	0.0037	21.37	8	0.4957	0.0037
0.5885	0.0004	0.5719				8	0.5695	0.0041	21.53	8	0.5695	0.0041
0.6693	0.1228	0.6502				8	0.6472	0.0046	21.66	8	0.6472	0.0046
0.7541	0.3220	0.7324	6.10	2	0.2862	6	0.4426	0.0051	21.78	8	0.7288	0.0051
0.8429	0.4855	0.8183	8.44	3	0.4597	5	0.3545	0.0055	21.88	8	0.8142	0.0055
0.9356	0.6197	0.9079	9.93	3	0.5140	5	0.3803	0.0060	21.96	8	0.9032	0.0060
1.0322	0.7432	1.0012	11.03	4	0.7146	4	0.2813	0.0066	22.06	8	0.9959	0.0066
1.1325	0.8623	1.0980	11.89	4	0.7871	4	0.3050	0.0071	22.13	8	1.0921	0.0071
1.2366	0.9802	1.1982	12.60	4	0.8625	4	0.3293	0.0076	22.20	8	1.1919	0.0076
1.3444	1.0982	1.3020	13.20	5	1.0884	3	0.2067	0.0081	22.27	8	1.2950	0.0081
1.4559	1.2173	1.4091	13.72	5	1.1804	3	0.2212	0.0087	22.32	8	1.4016	0.0087
1.5709	1.3380	1.5196	14.17	5	1.2755	3	0.2360	0.0092	22.38	8	1.5114	0.0092
1.6895	1.4607	1.6334	14.58	5	1.3736	3	0.2510	0.0098	22.42	8	1.6246	0.0098
1.8116	1.5856	1.7505	14.94	5	1.4748	3	0.2664	0.0104	22.47	8	1.7411	0.0104
1.9372	1.7129	1.8708	15.27	5	1.5789	3	0.2820	0.0110	22.51	8	1.8608	0.0110
2.0663	1.8427	1.9943	15.56	6	1.8415	2	0.1423	0.0115	22.55	8	1.9837	0.0115
2.1989	1.9750	2.1210	15.84	6	1.9600	2	0.1499	0.0121	22.59	8	2.1098	0.0121
2.3349	2.1101	2.2509	16.09	6	2.0815	2	0.1576	0.0128	22.62	8	2.2391	0.0128
2.4743	2.2478	2.3840	16.32	6	2.2061	2	0.1654	0.0134	22.66	8	2.3715	0.0134

Red Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.3721		0.3614				8	0.3607	0.0028	20.96	8	0.3607	0.0028
0.4399		0.4274				8	0.4261	0.0032	21.19	8	0.4261	0.0032
0.5120		0.4976				8	0.4957	0.0037	21.37	8	0.4957	0.0037
0.5885		0.5719				8	0.5695	0.0041	21.53	8	0.5695	0.0041
0.6693		0.6502				8	0.6472	0.0046	21.66	8	0.6472	0.0046
0.7541		0.7324				8	0.7288	0.0051	21.78	8	0.7288	0.0051
0.8429	0.0517	0.8183				8	0.8142	0.0055	21.88	8	0.8142	0.0055
0.9356	0.1858	0.9079				8	0.9032	0.0060	21.98	8	0.9032	0.0060
1.0322	0.3715	1.0012	4.90	1	0.2186	7	0.7773	0.0066	22.06	8	0.9959	0.0066
1.1325	0.5604	1.0980	6.90	2	0.4487	6	0.6434	0.0071	22.13	8	1.0921	0.0071
1.2366	0.7262	1.1982	8.39	3	0.6925	5	0.4993	0.0076	22.20	8	1.1919	0.0076
1.3444	0.8767	1.3020	9.52	3	0.7572	5	0.5378	0.0081	22.27	8	1.2950	0.0081
1.4559	1.0191	1.4091	10.42	3	0.8244	5	0.5772	0.0087	22.32	8	1.4016	0.0087
1.5709	1.1575	1.5196	11.16	4	1.1061	4	0.4053	0.0092	22.36	8	1.5114	0.0092
1.6895	1.2942	1.6334	11.80	4	1.1929	4	0.4317	0.0098	22.42	8	1.6246	0.0098
1.8116	1.4305	1.7505	12.35	4	1.2826	4	0.4585	0.0104	22.47	8	1.7411	0.0104
1.9372	1.5673	1.8708	12.84	4	1.3749	4	0.4859	0.0110	22.51	8	1.8608	0.0110
2.0663	1.7052	1.9943	13.27	5	1.6859	3	0.2978	0.0115	22.55	8	1.9837	0.0115
2.1989	1.8446	2.1210	13.66	5	1.7959	3	0.3139	0.0121	22.59	8	2.1098	0.0121
2.3349	1.9858	2.2509	14.01	5	1.9068	3	0.3303	0.0128	22.62	8	2.2391	0.0128
2.4743	2.1290	2.3840	14.34	5	2.0246	3	0.3469	0.0134	22.66	8	2.3715	0.0134

Total Height - 24 m

Sawlog, Pulp & Unmerchantable Volume

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.3721		0.3614				8	0.3607	0.0028	20.96	8	0.3607	0.0028
0.4399		0.4274				8	0.4261	0.0032	21.19	8	0.4261	0.0032
0.5120		0.4976				8	0.4957	0.0037	21.37	8	0.4957	0.0037
0.5885		0.5719				8	0.5695	0.0041	21.53	8	0.5695	0.0041
0.6693		0.6502				8	0.6472	0.0046	21.66	8	0.6472	0.0046
0.7541		0.7324				8	0.7288	0.0051	21.78	8	0.7288	0.0051
0.8429		0.8183				8	0.8142	0.0055	21.88	8	0.8142	0.0055
0.9356		0.9079				8	0.9032	0.0060	21.98	8	0.9032	0.0060
1.0322	0.0074	1.0012				8	0.9959	0.0066	22.06	8	0.9959	0.0066
1.1325	0.1139	1.0980				8	1.0921	0.0071	22.13	8	1.0921	0.0071
1.2366	0.2532	1.1982				8	1.1919	0.0076	22.20	8	1.1919	0.0076
1.3444	0.4282	1.3020	4.15	1	0.2966	7	0.9982	0.0081	22.27	8	1.2950	0.0081
1.4559	0.6220	1.4091	5.69	2	0.5924	6	0.8092	0.0087	22.32	8	1.4016	0.0087
1.5709	0.8107	1.5196	7.03	2	0.6443	6	0.8671	0.0092	22.36	8	1.5114	0.0092
1.6895	0.9876	1.6334	8.14	3	0.9662	5	0.6584	0.0098	22.42	8	1.6246	0.0098
1.8116	1.1548	1.7505	9.06	3	1.0409	5	0.7002	0.0104	22.47	8	1.7411	0.0104
1.9372	1.3158	1.8708	9.83	3	1.1179	5	0.7429	0.0110	22.51	8	1.8608	0.0110
2.0663	1.4731	1.9943	10.49	4	1.4701	4	0.5137	0.0115	22.55	8	1.9837	0.0115
2.1989	1.6285	2.1210	11.07	4	1.5679	4	0.5420	0.0121	22.59	8	2.1098	0.0121
2.3349	1.7830	2.2509	11.58	4	1.6684	4	0.5707	0.0128	22.62	8	2.2391	0.0128
2.4743	1.9376	2.3840	12.04	4	1.7716	4	0.5999	0.0134	22.66	8	2.3715	0.0134

Red Pine Sawlog and Pulp Volume Estimates

Total Height - 26 m | **Stump Height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
24	0.5632	0.5337	0.5488	19.97	7	0.5147	2	0.0340	0.0020	23.21	9	0.5487	0.0020
26	0.6473	0.6168	0.6307	20.38	7	0.5920	2	0.0383	0.0022	23.38	9	0.6303	0.0022
28	0.7359	0.7040	0.7170	20.72	8	0.7032	1	0.0130	0.0025	23.52	9	0.7162	0.0025
30	0.8291	0.7953	0.8076	21.01	8	0.7921	1	0.0144	0.0027	23.64	9	0.8064	0.0027
32	0.9265	0.8906	0.9022	21.26	8	0.8850	1	0.0158	0.0030	23.75	9	0.9007	0.0030
34	1.0282	0.9899	1.0008	21.49	8	0.9818	1	0.0172	0.0033	23.85	9	0.9990	0.0033
36	1.1340	1.0930	1.1034	21.68	8	1.0826	1	0.0186	0.0035	23.94	9	1.1013	0.0035
38	1.2439	1.1998	1.2098	21.86	8	1.1872	1	0.0201	0.0038	24.02	9	1.2073	0.0038
40	1.3578	1.3104	1.3200	22.02	8	1.2955	1	0.0216	0.0041	24.09	9	1.3172	0.0041
42	1.4756	1.4246	1.4338	22.17	8	1.4075	1	0.0232	0.0044	24.16	9	1.4307	0.0044
44	1.5973	1.5425	1.5514	22.30	8	1.5231	1	0.0247	0.0047	24.22	9	1.5479	0.0047
46	1.7228	1.6639	1.6725	22.42	8	1.6423	1	0.0263	0.0050	24.27	9	1.6686	0.0050
48	1.8521	1.7888	1.7971	22.53	8	1.7650	1	0.0279	0.0053	24.33	9	1.7930	0.0053
50	1.9851	1.9172	1.9252	22.64	8	1.8912	1	0.0296	0.0056	24.37	9	1.9208	0.0056
52	2.1218	2.0491	2.0568	22.74	8	2.0208	1	0.0313	0.0059	24.42	9	2.0520	0.0059
54	2.2622	2.1843	2.1919	22.82	8	2.1536	1	0.0329	0.0062	24.46	9	2.1867	0.0062
56	2.4063	2.3229	2.3303	22.91	8	2.2901	1	0.0347	0.0065	24.50	9	2.3248	0.0065
58	2.5539	2.4649	2.4720	22.99	8	2.4298	1	0.0364	0.0068	24.54	9	2.4662	0.0068
60	2.7051	2.6102	2.6171	23.06	8	2.5728	1	0.0382	0.0072	24.57	9	2.6109	0.0072

Total Height - 26 m | **Stump Height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
24	0.5632	0.4819	0.5488	15.90	6	0.4755	3	0.0732	0.0020	23.21	9	0.5487	0.0020
26	0.6473	0.5705	0.6307	16.72	6	0.5477	3	0.0825	0.0022	23.38	9	0.6303	0.0022
28	0.7359	0.6620	0.7170	17.38	6	0.6240	3	0.0922	0.0025	23.52	9	0.7162	0.0025
30	0.8291	0.7566	0.8076	17.93	6	0.7043	3	0.1022	0.0027	23.64	9	0.8064	0.0027
32	0.9265	0.8546	0.9022	18.40	7	0.8488	2	0.0519	0.0030	23.75	9	0.9007	0.0030
34	1.0282	0.9561	1.0008	18.80	7	0.9424	2	0.0567	0.0033	23.85	9	0.9990	0.0033
36	1.1340	1.0611	1.1034	19.15	7	1.0397	2	0.0615	0.0035	23.94	9	1.1013	0.0035
38	1.2439	1.1696	1.2098	19.46	7	1.1409	2	0.0665	0.0038	24.02	9	1.2073	0.0038
40	1.3578	1.2817	1.3200	19.73	7	1.2456	2	0.0715	0.0041	24.09	9	1.3172	0.0041
42	1.4756	1.3972	1.4338	19.98	7	1.3540	2	0.0767	0.0044	24.16	9	1.4307	0.0044
44	1.5973	1.5162	1.5514	20.20	7	1.4660	2	0.0819	0.0047	24.22	9	1.5479	0.0047
46	1.7228	1.6387	1.6725	20.41	7	1.5814	2	0.0872	0.0050	24.27	9	1.6686	0.0050
48	1.8521	1.7645	1.7971	20.59	7	1.7003	2	0.0927	0.0053	24.33	9	1.7930	0.0053
50	1.9851	1.8938	1.9252	20.76	8	1.8912	1	0.0296	0.0056	24.37	9	1.9208	0.0056
52	2.1218	2.0264	2.0568	20.92	8	2.0208	1	0.0313	0.0059	24.42	9	2.0520	0.0059
54	2.2622	2.1624	2.1919	21.07	8	2.1536	1	0.0329	0.0062	24.46	9	2.1867	0.0062
56	2.4063	2.3017	2.3303	21.21	8	2.2901	1	0.0347	0.0065	24.50	9	2.3248	0.0065
58	2.5539	2.4442	2.4720	21.34	8	2.4298	1	0.0364	0.0068	24.54	9	2.4662	0.0068
60	2.7051	2.5901	2.6171	21.46	8	2.5728	1	0.0382	0.0072	24.57	9	2.6109	0.0072

Red Pine Sawlog and Pulp Volume Estimates

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: [illegible]	Pulp & Unmerchantable Volume: [illegible]	Pulp & Unmerchantable Volume: [illegible]	Pulp & Unmerchantable Volume: [illegible]
[illegible]	0.5632	0.3053	0.5488	8.90	3	0.2739	6	0.2748	0.0020	23.21	9	0.5487	0.0020
[illegible]	0.6473	0.4378	0.6307	11.38	4	0.4080	5	0.2222	0.0022	23.38	9	0.6303	0.0022
[illegible]	0.7359	0.5512	0.7170	12.89	4	0.4670	5	0.2493	0.0025	23.52	9	0.7162	0.0025
[illegible]	0.8291	0.6596	0.8076	14.00	5	0.6269	4	0.1795	0.0027	23.64	9	0.8064	0.0027
[illegible]	0.9265	0.7679	0.9022	14.86	5	0.7030	4	0.1978	0.0030	23.75	9	0.9007	0.0030
[illegible]	1.0282	0.8770	1.0008	15.56	6	0.8762	3	0.1228	0.0033	23.85	9	0.9990	0.0033
[illegible]	1.1340	0.9880	1.1034	16.16	6	0.9678	3	0.1335	0.0035	23.94	9	1.1013	0.0035
[illegible]	1.2439	1.1015	1.2098	16.67	6	1.0629	3	0.1444	0.0038	24.02	9	1.2073	0.0038
[illegible]	1.3578	1.2177	1.3200	17.11	6	1.1616	3	0.1556	0.0041	24.09	9	1.3172	0.0041
[illegible]	1.4756	1.3368	1.4338	17.50	6	1.2638	3	0.1669	0.0044	24.16	9	1.4307	0.0044
[illegible]	1.5973	1.4589	1.5514	17.85	6	1.3694	3	0.1785	0.0047	24.22	9	1.5479	0.0047
[illegible]	1.7228	1.5840	1.6725	18.16	7	1.5814	2	0.0872	0.0050	24.27	9	1.6686	0.0050
[illegible]	1.8521	1.7123	1.7971	18.45	7	1.7003	2	0.0927	0.0053	24.33	9	1.7930	0.0053
[illegible]	1.9851	1.8437	1.9252	18.71	7	1.8226	2	0.0982	0.0056	24.37	9	1.9208	0.0056
[illegible]	2.1218	1.9782	2.0568	18.94	7	1.9483	2	0.1038	0.0059	24.42	9	2.0520	0.0059
[illegible]	2.2622	2.1160	2.1919	19.16	7	2.0773	2	0.1094	0.0062	24.46	9	2.1867	0.0062
[illegible]	2.4063	2.2566	2.3303	19.36	7	2.2096	2	0.1152	0.0065	24.50	9	2.3248	0.0065
[illegible]	2.5539	2.4009	2.4720	19.55	7	2.3452	2	0.1210	0.0068	24.54	9	2.4662	0.0068
[illegible]	2.7051	2.5481	2.6171	19.73	7	2.4840	2	0.1269	0.0072	24.57	9	2.6109	0.0072

Total Height - 26 m [illegible] **Merchantable Height - 9.2 m**

DBH (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: [illegible]	Pulp & Unmerchantable Volume: [illegible]	Pulp & Unmerchantable Volume: [illegible]	Pulp & Unmerchantable Volume: [illegible]
[illegible]	0.5632		0.5488				9	0.5487	0.0020	23.21	9	0.5487	0.0020
[illegible]	0.6473		0.6307				9	0.6303	0.0022	23.38	9	0.6303	0.0022
[illegible]	0.7359	0.1353	0.7170	2.89	1	0.1329	8	0.5834	0.0025	23.52	9	0.7162	0.0025
[illegible]	0.8291	0.3734	0.8076	7.06	2	0.2889	7	0.5176	0.0027	23.64	9	0.8064	0.0027
[illegible]	0.9265	0.5513	0.9022	9.55	3	0.4679	6	0.4328	0.0030	23.75	9	0.9007	0.0030
[illegible]	1.0282	0.6967	1.0008	11.12	4	0.6635	5	0.3355	0.0033	23.85	9	0.9990	0.0033
[illegible]	1.1340	0.8308	1.1034	12.27	4	0.7355	5	0.3658	0.0035	23.94	9	1.1013	0.0035
[illegible]	1.2439	0.9607	1.2098	13.17	5	0.9520	4	0.2553	0.0038	24.02	9	1.2073	0.0038
[illegible]	1.3578	1.0892	1.3200	13.92	5	1.0418	4	0.2753	0.0041	24.09	9	1.3172	0.0041
[illegible]	1.4756	1.2181	1.4338	14.55	5	1.1349	4	0.2958	0.0044	24.16	9	1.4307	0.0044
[illegible]	1.5973	1.3482	1.5514	15.10	5	1.2313	4	0.3166	0.0047	24.22	9	1.5479	0.0047
[illegible]	1.7228	1.4801	1.6725	15.57	6	1.4784	3	0.1903	0.0050	24.27	9	1.6686	0.0050
[illegible]	1.8521	1.6140	1.7971	16.00	6	1.5907	3	0.2023	0.0053	24.33	9	1.7930	0.0053
[illegible]	1.9851	1.7504	1.9252	16.38	6	1.7063	3	0.2144	0.0056	24.37	9	1.9208	0.0056
[illegible]	2.1218	1.8893	2.0568	16.73	6	1.8252	3	0.2268	0.0059	24.42	9	2.0520	0.0059
[illegible]	2.2622	2.0309	2.1919	17.04	6	1.9473	3	0.2394	0.0062	24.46	9	2.1867	0.0062
[illegible]	2.4063	2.1752	2.3303	17.33	6	2.0726	3	0.2521	0.0065	24.50	9	2.3248	0.0065
[illegible]	2.5539	2.3224	2.4720	17.59	6	2.2011	3	0.2650	0.0068	24.54	9	2.4662	0.0068
[illegible]	2.7051	2.4724	2.6171	17.84	6	2.3328	3	0.2782	0.0072	24.57	9	2.6109	0.0072

Red Pine Sawlog and Pulp Volume Estimates

26 metre

Total Height - 26 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5632	0.5337	0.5488	19.97	7	0.5147	2	0.0340	0.0020	23.21	9	0.5487	0.0020
26	0.6473	0.6168	0.6307	20.38	7	0.5920	2	0.0383	0.0022	23.38	9	0.6303	0.0022
28	0.7359	0.7040	0.7170	20.72	8	0.7032	1	0.0130	0.0025	23.52	9	0.7162	0.0025
30	0.8291	0.7953	0.8076	21.01	8	0.7921	1	0.0144	0.0027	23.64	9	0.8064	0.0027
32	0.9265	0.8906	0.9022	21.26	8	0.8850	1	0.0158	0.0030	23.75	9	0.9007	0.0030
34	1.0282	0.9899	1.0008	21.49	8	0.9818	1	0.0172	0.0033	23.85	9	0.9990	0.0033
36	1.1340	1.0930	1.1034	21.68	8	1.0826	1	0.0186	0.0035	23.94	9	1.1013	0.0035
38	1.2439	1.1998	1.2098	21.86	8	1.1872	1	0.0201	0.0038	24.02	9	1.2073	0.0038
40	1.3578	1.3104	1.3200	22.02	8	1.2955	1	0.0216	0.0041	24.09	9	1.3172	0.0041
42	1.4756	1.4246	1.4338	22.17	8	1.4075	1	0.0232	0.0044	24.16	9	1.4307	0.0044
44	1.5973	1.5425	1.5514	22.30	8	1.5231	1	0.0247	0.0047	24.22	9	1.5479	0.0047
46	1.7228	1.6639	1.6725	22.42	8	1.6423	1	0.0263	0.0050	24.27	9	1.6686	0.0050
48	1.8521	1.7888	1.7971	22.53	8	1.7650	1	0.0279	0.0053	24.33	9	1.7930	0.0053
50	1.9851	1.9172	1.9252	22.64	8	1.8912	1	0.0296	0.0056	24.37	9	1.9208	0.0056
52	2.1218	2.0491	2.0568	22.74	8	2.0208	1	0.0313	0.0059	24.42	9	2.0520	0.0059
54	2.2622	2.1843	2.1919	22.82	8	2.1538	1	0.0329	0.0062	24.46	9	2.1867	0.0062
56	2.4063	2.3229	2.3303	22.91	8	2.2901	1	0.0347	0.0065	24.50	9	2.3248	0.0065
58	2.5539	2.4649	2.4720	22.99	8	2.4298	1	0.0364	0.0068	24.54	9	2.4662	0.0068
60	2.7051	2.6102	2.6171	23.06	8	2.5728	1	0.0382	0.0072	24.57	9	2.6109	0.0072

Total Height - 26 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5632	0.4819	0.5488	15.90	6	0.4755	3	0.0732	0.0020	23.21	9	0.5487	0.0020
26	0.6473	0.5705	0.6307	16.72	6	0.5477	3	0.0825	0.0022	23.38	9	0.6303	0.0022
28	0.7359	0.6620	0.7170	17.38	6	0.6240	3	0.0922	0.0025	23.52	9	0.7162	0.0025
30	0.8291	0.7566	0.8076	17.93	6	0.7043	3	0.1022	0.0027	23.64	9	0.8064	0.0027
32	0.9265	0.8546	0.9022	18.40	7	0.8488	2	0.0519	0.0030	23.75	9	0.9007	0.0030
34	1.0282	0.9561	1.0008	18.80	7	0.9424	2	0.0567	0.0033	23.85	9	0.9990	0.0033
36	1.1340	1.0611	1.1034	19.15	7	1.0397	2	0.0615	0.0035	23.94	9	1.1013	0.0035
38	1.2439	1.1696	1.2098	19.46	7	1.1409	2	0.0665	0.0038	24.02	9	1.2073	0.0038
40	1.3578	1.2817	1.3200	19.73	7	1.2456	2	0.0715	0.0041	24.09	9	1.3172	0.0041
42	1.4756	1.3972	1.4338	19.98	7	1.3540	2	0.0767	0.0044	24.16	9	1.4307	0.0044
44	1.5973	1.5162	1.5514	20.20	7	1.4660	2	0.0819	0.0047	24.22	9	1.5479	0.0047
46	1.7228	1.6387	1.6725	20.41	7	1.5814	2	0.0872	0.0050	24.27	9	1.6686	0.0050
48	1.8521	1.7645	1.7971	20.59	7	1.7003	2	0.0927	0.0053	24.33	9	1.7930	0.0053
50	1.9851	1.8938	1.9252	20.76	8	1.8912	1	0.0296	0.0056	24.37	9	1.9208	0.0056
52	2.1218	2.0264	2.0568	20.92	8	2.0208	1	0.0313	0.0059	24.42	9	2.0520	0.0059
54	2.2622	2.1624	2.1919	21.07	8	2.1538	1	0.0329	0.0062	24.46	9	2.1867	0.0062
56	2.4063	2.3017	2.3303	21.21	8	2.2901	1	0.0347	0.0065	24.50	9	2.3248	0.0065
58	2.5539	2.4442	2.4720	21.34	8	2.4298	1	0.0364	0.0068	24.54	9	2.4662	0.0068
60	2.7051	2.5901	2.6171	21.46	8	2.5728	1	0.0382	0.0072	24.57	9	2.6109	0.0072

Red Pine Sawlog and Pulp Volume Estimates

26 metre

Total Height - 28 m				Sawlog Upper Diameter - 20 cm						Stump height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	5 cm upper	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5632	0.3053	0.5488	8.90	3	0.2739	6	0.2748	0.0020	23.21	9	0.5487	0.0020
26	0.6473	0.4378	0.6307	11.38	4	0.4080	5	0.2222	0.0022	23.38	9	0.6303	0.0022
28	0.7359	0.5512	0.7170	12.89	4	0.4670	5	0.2493	0.0025	23.52	9	0.7162	0.0025
30	0.8291	0.6598	0.8076	14.00	5	0.6269	4	0.1795	0.0027	23.64	9	0.8064	0.0027
32	0.9265	0.7679	0.9022	14.86	5	0.7030	4	0.1978	0.0030	23.75	9	0.9007	0.0030
34	1.0282	0.8770	1.0008	15.56	6	0.8762	3	0.1228	0.0033	23.85	9	0.9990	0.0033
36	1.1340	0.9880	1.1034	16.16	6	0.9678	3	0.1335	0.0035	23.94	9	1.1013	0.0035
38	1.2439	1.1015	1.2098	16.67	6	1.0629	3	0.1444	0.0038	24.02	9	1.2073	0.0038
40	1.3578	1.2177	1.3200	17.11	6	1.1616	3	0.1556	0.0041	24.09	9	1.3172	0.0041
42	1.4756	1.3368	1.4338	17.50	6	1.2638	3	0.1669	0.0044	24.16	9	1.4307	0.0044
44	1.5973	1.4589	1.5514	17.85	6	1.3694	3	0.1785	0.0047	24.22	9	1.5479	0.0047
46	1.7228	1.5840	1.6725	18.16	7	1.5814	2	0.0872	0.0050	24.27	9	1.6686	0.0050
48	1.8521	1.7123	1.7971	18.45	7	1.7003	2	0.0927	0.0053	24.33	9	1.7930	0.0053
50	1.9851	1.8437	1.9252	18.71	7	1.8226	2	0.0982	0.0056	24.37	9	1.9208	0.0056
52	2.1218	1.9782	2.0568	18.94	7	1.9483	2	0.1038	0.0059	24.42	9	2.0520	0.0059
54	2.2622	2.1160	2.1919	19.16	7	2.0773	2	0.1094	0.0062	24.46	9	2.1867	0.0062
56	2.4063	2.2568	2.3303	19.36	7	2.2096	2	0.1152	0.0065	24.50	9	2.3248	0.0065
58	2.5539	2.4009	2.4720	19.55	7	2.3452	2	0.1210	0.0068	24.54	9	2.4662	0.0068
60	2.7051	2.5481	2.6171	19.73	7	2.4840	2	0.1269	0.0072	24.57	9	2.6109	0.0072

Total Height - 26 m				Sawlog Upper Diameter - 25 cm						Stump height - 0.3 m			
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	5 cm upper	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5632		0.5488				9	0.5487	0.0020	23.21	9	0.5487	0.0020
26	0.6473		0.6307				9	0.6303	0.0022	23.38	9	0.6303	0.0022
28	0.7359	0.1353	0.7170	2.89	1	0.1329	8	0.5834	0.0025	23.52	9	0.7162	0.0025
30	0.8291	0.3734	0.8076	7.06	2	0.2889	7	0.5176	0.0027	23.64	9	0.8064	0.0027
32	0.9265	0.5513	0.9022	9.55	3	0.4679	6	0.4328	0.0030	23.75	9	0.9007	0.0030
34	1.0282	0.6967	1.0008	11.12	4	0.6635	5	0.3355	0.0033	23.85	9	0.9990	0.0033
36	1.1340	0.8308	1.1034	12.27	4	0.7355	5	0.3658	0.0035	23.94	9	1.1013	0.0035
38	1.2439	0.9607	1.2098	13.17	5	0.9520	4	0.2553	0.0038	24.02	9	1.2073	0.0038
40	1.3578	1.0892	1.3200	13.92	5	1.0418	4	0.2753	0.0041	24.09	9	1.3172	0.0041
42	1.4756	1.2181	1.4338	14.55	5	1.1349	4	0.2958	0.0044	24.16	9	1.4307	0.0044
44	1.5973	1.3482	1.5514	15.10	5	1.2313	4	0.3166	0.0047	24.22	9	1.5479	0.0047
46	1.7228	1.4801	1.6725	15.57	6	1.4784	3	0.1903	0.0050	24.27	9	1.6686	0.0050
48	1.8521	1.6140	1.7971	16.00	6	1.5907	3	0.2023	0.0053	24.33	9	1.7930	0.0053
50	1.9851	1.7504	1.9252	16.38	6	1.7063	3	0.2144	0.0056	24.37	9	1.9208	0.0056
52	2.1218	1.8893	2.0568	16.73	6	1.8252	3	0.2268	0.0059	24.42	9	2.0520	0.0059
54	2.2622	2.0309	2.1919	17.04	6	1.9473	3	0.2394	0.0062	24.46	9	2.1867	0.0062
56	2.4063	2.1752	2.3303	17.33	6	2.0726	3	0.2521	0.0065	24.50	9	2.3248	0.0065
58	2.5539	2.3224	2.4720	17.59	6	2.2011	3	0.2650	0.0068	24.54	9	2.4662	0.0068
60	2.7051	2.4724	2.6171	17.84	6	2.3328	3	0.2782	0.0072	24.57	9	2.6109	0.0072

Red Pine Sawlog and Pulp Volume Estimates

26 metre

Total Height - 26 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5632		0.5488				9	0.5487	0.0020	23.21	9	0.5487	0.0020
26	0.6473		0.6307				9	0.6303	0.0022	23.38	9	0.6303	0.0022
28	0.7359		0.7170				9	0.7162	0.0025	23.52	9	0.7162	0.0025
30	0.8291		0.8076				9	0.8064	0.0027	23.64	9	0.8064	0.0027
32	0.9265	0.0484	0.9022				9	0.9007	0.0030	23.75	9	0.9007	0.0030
34	1.0282	0.2034	1.0008	2.95	1	0.1954	8	0.8036	0.0033	23.85	9	0.9990	0.0033
36	1.1340	0.4254	1.1034	5.61	2	0.4092	7	0.6921	0.0035	23.94	9	1.1013	0.0035
38	1.2439	0.6392	1.2098	7.87	2	0.4536	7	0.7538	0.0038	24.02	9	1.2073	0.0038
40	1.3578	0.8203	1.3200	9.46	3	0.7064	6	0.6108	0.0041	24.09	9	1.3172	0.0041
42	1.4756	0.9838	1.4338	10.66	4	0.9697	5	0.4610	0.0044	24.16	9	1.4307	0.0044
44	1.5973	1.1385	1.5514	11.61	4	1.0538	5	0.4941	0.0047	24.22	9	1.5479	0.0047
46	1.7228	1.2890	1.6725	12.39	4	1.1408	5	0.5279	0.0050	24.27	9	1.6686	0.0050
48	1.8521	1.4378	1.7971	13.06	5	1.4335	4	0.3594	0.0053	24.33	9	1.7930	0.0053
50	1.9851	1.5861	1.9252	13.64	5	1.5394	4	0.3814	0.0056	24.37	9	1.9208	0.0056
52	2.1218	1.7351	2.0568	14.15	5	1.6483	4	0.4037	0.0059	24.42	9	2.0520	0.0059
54	2.2622	1.8852	2.1919	14.61	5	1.7603	4	0.4264	0.0062	24.46	9	2.1867	0.0062
56	2.4063	2.0369	2.3303	15.02	5	1.8753	4	0.4495	0.0065	24.50	9	2.3248	0.0065
58	2.5539	2.1905	2.4720	15.39	5	1.9933	4	0.4729	0.0068	24.54	9	2.4662	0.0068
60	2.7051	2.3463	2.6171	15.73	6	2.3328	3	0.2782	0.0072	24.57	9	2.6109	0.0072

Total Height - 26 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
24	0.5632		0.5488				9	0.5487	0.0020	23.21	9	0.5487	0.0020
26	0.6473		0.6307				9	0.6303	0.0022	23.38	9	0.6303	0.0022
28	0.7359		0.7170				9	0.7162	0.0025	23.52	9	0.7162	0.0025
30	0.8291		0.8076				9	0.8064	0.0027	23.64	9	0.8064	0.0027
32	0.9265		0.9022				9	0.9007	0.0030	23.75	9	0.9007	0.0030
34	1.0282		1.0008				9	0.9990	0.0033	23.85	9	0.9990	0.0033
36	1.1340		1.1034				9	1.1013	0.0035	23.94	9	1.1013	0.0035
38	1.2439	0.1148	1.2098				9	1.2073	0.0038	24.02	9	1.2073	0.0038
40	1.3578	0.2750	1.3200	2.89	1	0.2698	8	1.0474	0.0041	24.09	9	1.3172	0.0041
42	1.4756	0.4812	1.4338	4.67	1	0.2972	8	1.1335	0.0044	24.16	9	1.4307	0.0044
44	1.5973	0.7057	1.5514	6.46	2	0.5993	7	0.9486	0.0047	24.22	9	1.5479	0.0047
46	1.7228	0.9168	1.6725	7.96	3	0.9130	6	0.7557	0.0050	24.27	9	1.6686	0.0050
48	1.8521	1.1108	1.7971	9.16	3	0.9870	6	0.8060	0.0053	24.33	9	1.7930	0.0053
50	1.9851	1.2930	1.9252	10.14	3	1.0635	6	0.8572	0.0056	24.37	9	1.9208	0.0056
52	2.1218	1.4679	2.0568	10.96	4	1.4192	5	0.6329	0.0059	24.42	9	2.0520	0.0059
54	2.2622	1.6388	2.1919	11.66	4	1.5176	5	0.6691	0.0062	24.46	9	2.1867	0.0062
56	2.4063	1.8074	2.3303	12.27	4	1.6189	5	0.7059	0.0065	24.50	9	2.3248	0.0065
58	2.5539	1.9752	2.4720	12.81	4	1.7229	5	0.7432	0.0068	24.54	9	2.4662	0.0068
60	2.7051	2.1430	2.6171	13.29	5	2.1143	4	0.4966	0.0072	24.57	9	2.6109	0.0072

Red Pine Sawlog and Pulp Volume Estimates

Total Height - 28 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m** | 28 metre

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
30	0.9060	0.8717	0.8847	22.73	8	0.8488	1	0.0260	0.0115	25.51	9	0.8749	0.0115
32	1.0124	0.9761	0.9883	23.00	8	0.9488	1	0.0286	0.0126	25.63	9	0.9773	0.0126
34	1.1234	1.0847	1.0963	23.23	9	1.0841	1	0.0121	0.0016	25.73	10	1.0962	0.0016
36	1.2388	1.1975	1.2086	23.44	9	1.1952	1	0.0131	0.0017	25.83	10	1.2083	0.0017
38	1.3586	1.3144	1.3249	23.63	9	1.3103	1	0.0142	0.0019	25.91	10	1.3245	0.0019
40	1.4827	1.4353	1.4454	23.80	9	1.4295	1	0.0152	0.0020	25.99	10	1.4447	0.0020
42	1.6110	1.5601	1.5698	23.95	9	1.5527	1	0.0163	0.0021	26.05	10	1.5690	0.0021
44	1.7434	1.6888	1.6981	24.09	9	1.6797	1	0.0174	0.0023	26.12	10	1.6971	0.0023
46	1.8799	1.8213	1.8303	24.22	9	1.8106	1	0.0185	0.0024	26.18	10	1.8291	0.0024
48	2.0204	1.9576	1.9663	24.34	9	1.9453	1	0.0196	0.0026	26.23	10	1.9649	0.0026
50	2.1648	2.0975	2.1060	24.45	9	2.0837	1	0.0208	0.0027	26.28	10	2.1045	0.0027
52	2.3132	2.2412	2.2494	24.55	9	2.2257	1	0.0219	0.0028	26.33	10	2.2477	0.0028
54	2.4655	2.3885	2.3964	24.64	9	2.3714	1	0.0231	0.0030	26.37	10	2.3945	0.0030
56	2.6216	2.5393	2.5471	24.73	9	2.5207	1	0.0243	0.0032	26.41	10	2.5450	0.0032
58	2.7815	2.6937	2.7012	24.81	9	2.6735	1	0.0255	0.0033	26.45	10	2.6990	0.0033
60	2.9452	2.8516	2.8590	24.89	9	2.8298	1	0.0267	0.0035	26.49	10	2.8565	0.0035

Total Height - 28 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
30	0.9060	0.8309	0.8847	19.49	7	0.8027	2	0.0721	0.0115	25.51	9	0.8749	0.0115
32	1.0124	0.9381	0.9883	19.98	7	0.8980	2	0.0793	0.0126	25.63	9	0.9773	0.0126
34	1.1234	1.0491	1.0963	20.40	7	0.9975	3	0.0988	0.0016	25.73	10	1.0962	0.0016
36	1.2388	1.1639	1.2086	20.77	8	1.1613	2	0.0470	0.0017	25.83	10	1.2083	0.0017
38	1.3586	1.2826	1.3249	21.09	8	1.2737	2	0.0508	0.0019	25.91	10	1.3245	0.0019
40	1.4827	1.4050	1.4454	21.38	8	1.3901	2	0.0546	0.0020	25.99	10	1.4447	0.0020
42	1.6110	1.5312	1.5698	21.64	8	1.5105	2	0.0585	0.0021	26.05	10	1.5690	0.0021
44	1.7434	1.6611	1.6981	21.88	8	1.6347	2	0.0625	0.0023	26.12	10	1.6971	0.0023
46	1.8799	1.7947	1.8303	22.09	8	1.7626	2	0.0665	0.0024	26.18	10	1.8291	0.0024
48	2.0204	1.9319	1.9663	22.29	8	1.8943	2	0.0706	0.0026	26.23	10	1.9649	0.0026
50	2.1648	2.0728	2.1060	22.47	8	2.0297	2	0.0747	0.0027	26.28	10	2.1045	0.0027
52	2.3132	2.2173	2.2494	22.64	8	2.1687	2	0.0789	0.0028	26.33	10	2.2477	0.0028
54	2.4655	2.3653	2.3964	22.79	8	2.3113	2	0.0832	0.0030	26.37	10	2.3945	0.0030
56	2.6216	2.5168	2.5471	22.93	8	2.4574	2	0.0875	0.0032	26.41	10	2.5450	0.0032
58	2.7815	2.6719	2.7012	23.07	8	2.6071	2	0.0919	0.0033	26.45	10	2.6990	0.0033
60	2.9452	2.8304	2.8590	23.19	9	2.8298	1	0.0267	0.0035	26.49	10	2.8565	0.0035

Total Height - 28 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
30	0.9060	0.7293	0.8847	15.35	5	0.6469	4	0.2280	0.0115	25.51	9	0.8749	0.0115
32	1.0124	0.8469	0.9883	16.26	6	0.8234	3	0.1539	0.0126	25.63	9	0.9773	0.0126
34	1.1234	0.9659	1.0963	17.00	6	0.9158	4	0.1805	0.0016	25.73	10	1.0962	0.0016
36	1.2388	1.0870	1.2086	17.62	6	1.0120	4	0.1963	0.0017	25.83	10	1.2083	0.0017
38	1.3586	1.2108	1.3249	18.15	7	1.2085	3	0.1160	0.0019	25.91	10	1.3245	0.0019
40	1.4827	1.3376	1.4454	18.62	7	1.3199	3	0.1249	0.0020	25.99	10	1.4447	0.0020
42	1.6110	1.4675	1.5698	19.03	7	1.4351	3	0.1339	0.0021	26.05	10	1.5690	0.0021
44	1.7434	1.6006	1.6981	19.40	7	1.5540	3	0.1431	0.0023	26.12	10	1.6971	0.0023
46	1.8799	1.7370	1.8303	19.73	7	1.6767	3	0.1525	0.0024	26.18	10	1.8291	0.0024
48	2.0204	1.8768	1.9663	20.03	7	1.8030	3	0.1620	0.0026	26.23	10	1.9649	0.0026
50	2.1648	2.0199	2.1060	20.30	7	1.9328	3	0.1716	0.0027	26.28	10	2.1045	0.0027
52	2.3132	2.1664	2.2494	20.55	7	2.0663	3	0.1814	0.0028	26.33	10	2.2477	0.0028
54	2.4655	2.3163	2.3964	20.78	8	2.3113	2	0.0832	0.0030	26.37	10	2.3945	0.0030
56	2.6216	2.4695	2.5471	20.99	8	2.4574	2	0.0875	0.0032	26.41	10	2.5450	0.0032
58	2.7815	2.6261	2.7012	21.18	8	2.6071	2	0.0919	0.0033	26.45	10	2.6990	0.0033
60	2.9452	2.7860	2.8590	21.37	8	2.7601	2	0.0964	0.0035	26.49	10	2.8565	0.0035

Red Pine Sawlog and Pulp Volume Estimates

Total Height - 23 m														Stump Height - 0.3 m
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume				
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
26	0.5632		0.5488				9	0.5487	0.0020	23.21	9	0.5487	0.0020
28	0.6473		0.6307				9	0.6303	0.0022	23.38	9	0.6303	0.0022
30	0.7359		0.7170				9	0.7162	0.0025	23.52	9	0.7162	0.0025
32	0.8291		0.8076				9	0.8064	0.0027	23.64	9	0.8064	0.0027
34	0.9265	0.0484	0.9022				9	0.9007	0.0030	23.75	9	0.9007	0.0030
36	1.0282	0.2034	1.0008	2.95	1	0.1954	8	0.8036	0.0033	23.85	9	0.9990	0.0033
38	1.1340	0.4254	1.1034	5.61	2	0.4092	7	0.6921	0.0035	23.94	9	1.1013	0.0035
40	1.2439	0.6392	1.2098	7.87	2	0.4536	7	0.7538	0.0038	24.02	9	1.2073	0.0038
42	1.3578	0.8203	1.3200	9.46	3	0.7064	6	0.6108	0.0041	24.09	9	1.3172	0.0041
44	1.4756	0.9838	1.4338	10.66	4	0.9697	5	0.4610	0.0044	24.16	9	1.4307	0.0044
46	1.5973	1.1385	1.5514	11.61	4	1.0538	5	0.4941	0.0047	24.22	9	1.5479	0.0047
48	1.7228	1.2890	1.6725	12.39	4	1.1408	5	0.5279	0.0050	24.27	9	1.6686	0.0050
50	1.8521	1.4378	1.7971	13.06	5	1.4335	4	0.3594	0.0053	24.33	9	1.7930	0.0053
52	1.9851	1.5861	1.9252	13.64	5	1.5394	4	0.3814	0.0056	24.37	9	1.9203	0.0056
54	2.1218	1.7351	2.0568	14.15	5	1.6483	4	0.4037	0.0059	24.42	9	2.0520	0.0059
56	2.2622	1.8852	2.1919	14.61	5	1.7603	4	0.4264	0.0062	24.46	9	2.1867	0.0062
58	2.4063	2.0369	2.3303	15.02	5	1.8753	4	0.4495	0.0065	24.50	9	2.3248	0.0065
60	2.5539	2.1905	2.4720	15.39	5	1.9933	4	0.4729	0.0068	24.54	9	2.4662	0.0068
62	2.7051	2.3463	2.6171	15.73	6	2.3328	3	0.2782	0.0072	24.57	9	2.6109	0.0072

Total Height - 29 m														Stump Height - 0.3 m
				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume				
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
26	0.5632		0.5488				9	0.5487	0.0020	23.21	9	0.5487	0.0020
28	0.6473		0.6307				9	0.6303	0.0022	23.38	9	0.6303	0.0022
30	0.7359		0.7170				9	0.7162	0.0025	23.52	9	0.7162	0.0025
32	0.8291		0.8076				9	0.8064	0.0027	23.64	9	0.8064	0.0027
34	0.9265		0.9022				9	0.9007	0.0030	23.75	9	0.9007	0.0030
36	1.0282		1.0008				9	0.9990	0.0033	23.85	9	0.9990	0.0033
38	1.1340		1.1034				9	1.1013	0.0035	23.94	9	1.1013	0.0035
40	1.2439	0.1148	1.2098				9	1.2073	0.0038	24.02	9	1.2073	0.0038
42	1.3578	0.2750	1.3200	2.89	1	0.2698	8	1.0474	0.0041	24.09	9	1.3172	0.0041
44	1.4756	0.4812	1.4338	4.67	1	0.2972	8	1.1335	0.0044	24.16	9	1.4307	0.0044
46	1.5973	0.7057	1.5514	6.46	2	0.5993	7	0.9486	0.0047	24.22	9	1.5479	0.0047
48	1.7228	0.9168	1.6725	7.96	3	0.9130	6	0.7557	0.0050	24.27	9	1.6686	0.0050
50	1.8521	1.1108	1.7971	9.16	3	0.9870	6	0.8060	0.0053	24.33	9	1.7930	0.0053
52	1.9851	1.2930	1.9252	10.14	3	1.0635	6	0.8572	0.0056	24.37	9	1.9208	0.0056
54	2.1218	1.4679	2.0568	10.96	4	1.4192	5	0.6329	0.0059	24.42	9	2.0520	0.0059
56	2.2622	1.6388	2.1919	11.66	4	1.5176	5	0.6691	0.0062	24.46	9	2.1867	0.0062
58	2.4063	1.8074	2.3303	12.27	4	1.6189	5	0.7059	0.0065	24.50	9	2.3248	0.0065
60	2.5539	1.9752	2.4720	12.81	4	1.7229	5	0.7432	0.0068	24.54	9	2.4662	0.0068
62	2.7051	2.1430	2.6171	13.29	5	2.1143	4	0.4966	0.0072	24.57	9	2.6109	0.0072

Red Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.9060	0.8717	0.8847	22.73	8	0.8488	1	0.0260	0.0115	25.51	9	0.8749	0.0115
1.0124	0.9781	0.9863	23.00	8	0.9488	1	0.0286	0.0126	25.63	9	0.9773	0.0126
1.1234	1.0847	1.0963	23.23	9	1.0841	1	0.0121	0.0016	25.73	10	1.0962	0.0016
1.2388	1.1975	1.2066	23.44	9	1.1952	1	0.0131	0.0017	25.83	10	1.2083	0.0017
1.3586	1.3144	1.3249	23.63	9	1.3103	1	0.0142	0.0019	25.91	10	1.3245	0.0019
1.4827	1.4353	1.4454	23.80	9	1.4295	1	0.0152	0.0020	25.99	10	1.4447	0.0020
1.6110	1.5601	1.5698	23.96	9	1.5527	1	0.0163	0.0021	26.05	10	1.5690	0.0021
1.7434	1.6886	1.6981	24.09	9	1.6797	1	0.0174	0.0023	26.12	10	1.6971	0.0023
1.8799	1.8213	1.8303	24.22	9	1.8106	1	0.0185	0.0024	26.18	10	1.8291	0.0024
2.0204	1.9576	1.9663	24.34	9	1.9453	1	0.0196	0.0026	26.23	10	1.9649	0.0026
2.1648	2.0975	2.1060	24.45	9	2.0837	1	0.0206	0.0027	26.28	10	2.1045	0.0027
2.3132	2.2412	2.2494	24.55	9	2.2257	1	0.0219	0.0028	26.33	10	2.2477	0.0028
2.4655	2.3885	2.3964	24.64	9	2.3714	1	0.0231	0.0030	26.37	10	2.3945	0.0030
2.6216	2.5393	2.5471	24.73	9	2.5207	1	0.0243	0.0032	26.41	10	2.5450	0.0032
2.7815	2.6937	2.7012	24.81	9	2.6735	1	0.0255	0.0033	26.45	10	2.6990	0.0033
2.9452	2.8516	2.8590	24.89	9	2.8298	1	0.0267	0.0035	26.49	10	2.8565	0.0035

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.9060	0.8309	0.8847	19.49	7	0.8027	2	0.0721	0.0115	25.51	9	0.8749	0.0115
1.0124	0.9381	0.9863	19.98	7	0.8980	2	0.0793	0.0126	25.63	9	0.9773	0.0126
1.1234	1.0491	1.0963	20.40	7	0.9975	3	0.0988	0.0016	25.73	10	1.0962	0.0016
1.2388	1.1639	1.2066	20.77	8	1.1613	2	0.0470	0.0017	25.83	10	1.2083	0.0017
1.3586	1.2826	1.3249	21.09	8	1.2737	2	0.0508	0.0019	25.91	10	1.3245	0.0019
1.4827	1.4050	1.4454	21.38	8	1.3901	2	0.0546	0.0020	25.99	10	1.4447	0.0020
1.6110	1.5312	1.5698	21.64	8	1.5105	2	0.0585	0.0021	26.05	10	1.5690	0.0021
1.7434	1.6611	1.6981	21.88	8	1.6347	2	0.0625	0.0023	26.12	10	1.6971	0.0023
1.8799	1.7947	1.8303	22.09	8	1.7626	2	0.0665	0.0024	26.18	10	1.8291	0.0024
2.0204	1.9319	1.9663	22.29	8	1.8943	2	0.0706	0.0026	26.23	10	1.9649	0.0026
2.1648	2.0728	2.1060	22.47	8	2.0297	2	0.0747	0.0027	26.28	10	2.1045	0.0027
2.3132	2.2173	2.2494	22.64	8	2.1687	2	0.0789	0.0028	26.33	10	2.2477	0.0028
2.4655	2.3653	2.3964	22.79	8	2.3113	2	0.0832	0.0030	26.37	10	2.3945	0.0030
2.6216	2.5168	2.5471	22.93	8	2.4574	2	0.0875	0.0032	26.41	10	2.5450	0.0032
2.7815	2.6719	2.7012	23.07	8	2.6071	2	0.0919	0.0033	26.45	10	2.6990	0.0033
2.9452	2.8304	2.8590	23.19	9	2.8298	1	0.0267	0.0035	26.49	10	2.8565	0.0035

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
0.9060	0.7293	0.8847	15.35	5	0.6469	4	0.2280	0.0115	25.51	9	0.8749	0.0115
1.0124	0.8469	0.9863	16.26	6	0.8234	3	0.1539	0.0126	25.63	9	0.9773	0.0126
1.1234	0.9659	1.0963	17.00	6	0.9158	4	0.1805	0.0016	25.73	10	1.0962	0.0016
1.2388	1.0870	1.2066	17.62	6	1.0120	4	0.1963	0.0017	25.83	10	1.2083	0.0017
1.3586	1.2108	1.3249	18.15	7	1.2085	3	0.1160	0.0019	25.91	10	1.3245	0.0019
1.4827	1.3376	1.4454	18.62	7	1.3199	3	0.1249	0.0020	25.99	10	1.4447	0.0020
1.6110	1.4675	1.5698	19.03	7	1.4351	3	0.1339	0.0021	26.05	10	1.5690	0.0021
1.7434	1.6006	1.6981	19.40	7	1.5540	3	0.1431	0.0023	26.12	10	1.6971	0.0023
1.8799	1.7370	1.8303	19.73	7	1.6767	3	0.1525	0.0024	26.18	10	1.8291	0.0024
2.0204	1.8768	1.9663	20.03	7	1.8030	3	0.1620	0.0026	26.23	10	1.9649	0.0026
2.1648	2.0199	2.1060	20.30	7	1.9328	3	0.1715	0.0027	26.28	10	2.1045	0.0027
2.3132	2.1664	2.2494	20.55	7	2.0663	3	0.1814	0.0028	26.33	10	2.2477	0.0028
2.4655	2.3163	2.3964	20.78	8	2.3113	2	0.0832	0.0030	26.37	10	2.3945	0.0030
2.6216	2.4695	2.5471	20.99	8	2.4574	2	0.0875	0.0032	26.41	10	2.5450	0.0032
2.7815	2.6261	2.7012	21.18	8	2.6071	2	0.0919	0.0033	26.45	10	2.6990	0.0033
2.9452	2.7860	2.8590	21.37	8	2.7801	2	0.0964	0.0035	26.49	10	2.8565	0.0035

Red Pine Sawlog and Pulp Volume Estimates

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.9080	0.4301	0.8847	8.11	3	0.4209	6	0.4539	0.0115	25.51	9	0.8749	0.0115
22	1.0124	0.6208	0.9883	10.71	4	0.6083	5	0.3891	0.0126	25.63	9	0.9773	0.0126
24	1.1234	0.7772	1.0963	12.35	4	0.6790	6	0.4172	0.0016	25.73	10	1.0962	0.0016
26	1.2388	0.9222	1.2086	13.54	5	0.8950	5	0.3133	0.0017	25.83	10	1.2083	0.0017
28	1.3586	1.0629	1.3249	14.49	5	0.9849	5	0.3396	0.0019	25.91	10	1.3245	0.0019
30	1.4827	1.2026	1.4454	15.27	5	1.0783	5	0.3664	0.0020	25.99	10	1.4447	0.0020
32	1.6110	1.3427	1.5698	15.93	6	1.3232	4	0.2458	0.0021	26.05	10	1.5690	0.0021
34	1.7434	1.4842	1.6981	16.50	6	1.4342	4	0.2629	0.0023	26.12	10	1.6971	0.0023
36	1.8799	1.6276	1.8303	17.00	6	1.5486	4	0.2804	0.0024	26.18	10	1.8291	0.0024
38	2.0204	1.7733	1.9663	17.45	6	1.6669	4	0.2981	0.0026	26.23	10	1.9649	0.0026
40	2.1648	1.9216	2.1060	17.85	6	1.7884	4	0.3161	0.0027	26.28	10	2.1045	0.0027
42	2.3132	2.0727	2.2494	18.21	7	2.0663	3	0.1814	0.0028	26.33	10	2.2477	0.0028
44	2.4655	2.2266	2.3964	18.54	7	2.2032	3	0.1913	0.0030	26.37	10	2.3945	0.0030
46	2.6216	2.3834	2.5471	18.84	7	2.3436	3	0.2014	0.0032	26.41	10	2.5450	0.0032
48	2.7815	2.5432	2.7012	19.12	7	2.4874	3	0.2116	0.0033	26.45	10	2.6990	0.0033
50	2.9452	2.7061	2.8590	19.37	7	2.6346	3	0.2219	0.0035	26.49	10	2.8585	0.0035

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.9060		0.8847			0.0000	9	0.8749	0.0115	25.51	9	0.8749	0.0115
22	1.0124	0.0450	0.9883			0.0000	9	0.9773	0.0126	25.63	9	0.9773	0.0126
24	1.1234	0.2237	1.0963	3.23	1	0.1956	9	0.9006	0.0016	25.73	10	1.0962	0.0016
26	1.2388	0.4877	1.2086	6.42	2	0.4128	8	0.7955	0.0017	25.83	10	1.2083	0.0017
28	1.3586	0.7246	1.3249	8.91	3	0.6533	7	0.6712	0.0019	25.91	10	1.3245	0.0019
30	1.4827	0.9203	1.4454	10.59	4	0.9109	6	0.5339	0.0020	25.99	10	1.4447	0.0020
32	1.6110	1.0967	1.5698	11.84	4	0.9945	6	0.5745	0.0021	26.05	10	1.5690	0.0021
34	1.7434	1.2639	1.6981	12.84	4	1.0812	6	0.6159	0.0023	26.12	10	1.6971	0.0023
36	1.8799	1.4268	1.8303	13.66	5	1.3791	5	0.4500	0.0024	26.18	10	1.8291	0.0024
38	2.0204	1.5879	1.9663	14.36	5	1.4860	5	0.4786	0.0026	26.23	10	1.9649	0.0026
40	2.1648	1.7487	2.1060	14.96	5	1.5962	5	0.5063	0.0027	26.28	10	2.1045	0.0027
42	2.3132	1.9103	2.2494	15.50	5	1.7095	5	0.5381	0.0028	26.33	10	2.2477	0.0028
44	2.4655	2.0731	2.3964	15.97	6	2.0417	4	0.3529	0.0030	26.37	10	2.3945	0.0030
46	2.6216	2.2378	2.5471	16.40	6	2.1733	4	0.3717	0.0032	26.41	10	2.5450	0.0032
48	2.7815	2.4042	2.7012	16.79	6	2.3082	4	0.3907	0.0033	26.45	10	2.6990	0.0033
50	2.9452	2.5731	2.8590	17.15	6	2.4464	4	0.4101	0.0035	26.49	10	2.8585	0.0035

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	Pulp & Unmerchantable Volume: No. of 2.54 m (8 foot) pulp logs	Pulp & Unmerchantable Volume: Gross Merch. volume of all pulp logs (m^3)	Pulp & Unmerchantable Volume: Remaining Unmerch. volume after pulp logs removed (m^3)
20	0.9060		0.8847				9	0.8749	0.0115	25.51	9	0.8749	0.0115
22	1.0124		0.9883				9	0.9773	0.0126	25.63	9	0.9773	0.0126
24	1.1234		1.0963				10	1.0962	0.0016	25.73	10	1.0962	0.0016
26	1.2388		1.2086				10	1.2083	0.0017	25.83	10	1.2083	0.0017
28	1.3586	0.1159	1.3249				10	1.3245	0.0019	25.91	10	1.3245	0.0019
30	1.4827	0.2998	1.4454	3.15	1	0.2701	9	1.1746	0.0020	25.99	10	1.4447	0.0020
32	1.6110	0.5426	1.5698	5.26	1	0.2978	9	1.2714	0.0021	26.05	10	1.5690	0.0021
34	1.7434	0.7996	1.6981	7.32	2	0.9054	9	1.0917	0.0023	26.12	10	1.6971	0.0023
36	1.8799	1.0323	1.8303	8.96	3	0.9295	7	0.8996	0.0024	26.18	10	1.8291	0.0024
38	2.0204	1.2429	1.9663	10.24	3	1.0052	7	0.9597	0.0026	26.23	10	1.9649	0.0026
40	2.1648	1.4398	2.1060	11.27	4	1.3595	6	0.7450	0.0027	26.28	10	2.1045	0.0027
42	2.3132	1.6269	2.2494	12.13	4	1.4581	6	0.7995	0.0028	26.33	10	2.2477	0.0028
44	2.4655	1.8135	2.3964	12.87	4	1.5597	6	0.8348	0.0030	26.37	10	2.3945	0.0030
46	2.6216	1.9956	2.5471	13.51	5	1.9456	5	0.5992	0.0032	26.41	10	2.5450	0.0032
48	2.7815	2.1773	2.7012	14.07	5	2.0686	5	0.6304	0.0033	26.45	10	2.6990	0.0033
50	2.9452	2.3587	2.8590	14.58	5	2.1945	5	0.6620	0.0035	26.49	10	2.8585	0.0035

Red Pine Sawlog and Pulp Volume Estimates

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
1.3463	1.3047	1.3163	25.21	9	1.2818	1	0.0264	0.0096	27.71	10	1.3082	0.0096
1.4764	1.4319	1.4430	25.41	9	1.4056	1	0.0286	0.0104	27.80	10	1.4341	0.0104
1.6110	1.5635	1.5741	25.58	9	1.5337	1	0.0307	0.0112	27.88	10	1.5644	0.0112
1.7502	1.6893	1.7095	25.75	10	1.6989	0	0.0000	0.0119	27.95	10	1.6989	0.0119
1.8938	1.8392	1.8491	25.89	10	1.8377	0	0.0000	0.0127	28.02	10	1.8377	0.0127
2.0417	1.9833	1.9928	26.03	10	1.9805	0	0.0000	0.0135	28.08	10	1.9805	0.0135
2.1939	2.1313	2.1405	26.15	10	2.1274	0	0.0000	0.0144	28.14	10	2.1274	0.0144
2.3503	2.2834	2.2922	26.26	10	2.2783	0	0.0000	0.0152	28.19	10	2.2783	0.0152
2.5108	2.4393	2.4479	26.37	10	2.4331	1	0.0149	0.0012	28.24	11	2.4479	0.0012
2.6755	2.5991	2.6075	26.47	10	2.5917	1	0.0156	0.0012	28.29	11	2.6074	0.0012
2.8442	2.7627	2.7708	26.56	10	2.7542	1	0.0164	0.0013	28.33	11	2.7706	0.0013
3.0169	2.9300	2.9380	26.65	10	2.9205	1	0.0172	0.0014	28.37	11	2.9377	0.0014
3.1936	3.1011	3.1089	26.73	10	3.0904	1	0.0181	0.0014	28.41	11	3.1085	0.0014

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
1.3463	1.2695	1.3163	22.40	8	1.2316	2	0.0766	0.0096	27.71	10	1.3082	0.0096
1.4764	1.3985	1.4430	22.74	8	1.3513	2	0.0828	0.0104	27.80	10	1.4341	0.0104
1.6110	1.5317	1.5741	23.05	8	1.4753	2	0.0891	0.0112	27.88	10	1.5644	0.0112
1.7502	1.6689	1.7095	23.32	9	1.6660	1	0.0329	0.0119	27.95	10	1.6989	0.0119
1.8938	1.8101	1.8491	23.57	9	1.8026	1	0.0351	0.0127	28.02	10	1.8377	0.0127
2.0417	1.9553	1.9928	23.79	9	1.9431	1	0.0374	0.0135	28.08	10	1.9805	0.0135
2.1939	2.1044	2.1405	24.00	9	2.0877	1	0.0397	0.0144	28.14	10	2.1274	0.0144
2.3503	2.2574	2.2922	24.18	9	2.2363	1	0.0420	0.0152	28.19	10	2.2783	0.0152
2.5108	2.4141	2.4479	24.36	9	2.3887	2	0.0592	0.0012	28.24	11	2.4479	0.0012
2.6755	2.5747	2.6075	24.52	9	2.5450	2	0.0624	0.0012	28.29	11	2.6074	0.0012
2.8442	2.7391	2.7708	24.67	9	2.7051	2	0.0656	0.0013	28.33	11	2.7706	0.0013
3.0169	2.9071	2.9380	24.81	9	2.8689	2	0.0688	0.0014	28.37	11	2.9377	0.0014
3.1936	3.0788	3.1089	24.94	9	3.0364	2	0.0721	0.0014	28.41	11	3.1085	0.0014

Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
1.3463	1.1888	1.3163	19.10	7	1.1545	3	0.1537	0.0096	27.71	10	1.3082	0.0096
1.4764	1.3233	1.4430	19.66	7	1.2678	3	0.1663	0.0104	27.80	10	1.4341	0.0104
1.6110	1.4610	1.5741	20.15	7	1.3853	3	0.1791	0.0112	27.88	10	1.5644	0.0112
1.7502	1.6021	1.7095	20.58	7	1.5067	3	0.1922	0.0119	27.95	10	1.6989	0.0119
1.8938	1.7467	1.8491	20.96	8	1.7356	2	0.1020	0.0127	28.02	10	1.8377	0.0127
2.0417	1.8948	1.9928	21.31	8	1.8718	2	0.1087	0.0135	28.08	10	1.9805	0.0135
2.1939	2.0465	2.1405	21.62	8	2.0120	2	0.1154	0.0144	28.14	10	2.1274	0.0144
2.3503	2.2018	2.2922	21.90	8	2.1560	2	0.1222	0.0152	28.19	10	2.2783	0.0152
2.5108	2.3607	2.4479	22.16	8	2.3039	3	0.1440	0.0012	28.24	11	2.4479	0.0012
2.6755	2.5232	2.6075	22.40	8	2.4556	3	0.1518	0.0012	28.29	11	2.6074	0.0012
2.8442	2.6893	2.7708	22.63	8	2.6109	3	0.1597	0.0013	28.33	11	2.7706	0.0013
3.0169	2.8590	2.9380	22.83	8	2.7700	3	0.1677	0.0014	28.37	11	2.9377	0.0014
3.1936	3.0322	3.1089	23.02	8	2.9327	3	0.1758	0.0014	28.41	11	3.1085	0.0014

Red Pine Sawlog and Pulp Volume Estimates

28 metre

Total Height - 28 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
30	0.9060	0.4301	0.8847	8.11	3	0.4209	6	0.4539	0.0115	25.51	9	0.8749	0.0115
32	1.0124	0.6208	0.9883	10.71	4	0.6083	5	0.3691	0.0126	25.63	9	0.9773	0.0126
34	1.1234	0.7772	1.0963	12.35	4	0.6790	6	0.4172	0.0016	25.73	10	1.0962	0.0016
36	1.2388	0.9222	1.2086	13.54	5	0.8950	5	0.3133	0.0017	25.83	10	1.2083	0.0017
38	1.3586	1.0629	1.3249	14.49	5	0.9849	5	0.3396	0.0019	25.91	10	1.3245	0.0019
40	1.4827	1.2026	1.4454	15.27	5	1.0783	5	0.3664	0.0020	25.99	10	1.4447	0.0020
42	1.6110	1.3427	1.5698	15.93	6	1.3232	4	0.2458	0.0021	26.05	10	1.5690	0.0021
44	1.7434	1.4842	1.6981	16.50	6	1.4342	4	0.2629	0.0023	26.12	10	1.6971	0.0023
46	1.8799	1.6276	1.8303	17.00	6	1.5488	4	0.2804	0.0024	26.18	10	1.8291	0.0024
48	2.0204	1.7733	1.9663	17.45	6	1.6669	4	0.2981	0.0026	26.23	10	1.9649	0.0026
50	2.1648	1.9216	2.1060	17.85	6	1.7884	4	0.3161	0.0027	26.28	10	2.1045	0.0027
52	2.3132	2.0727	2.2494	18.21	7	2.0663	3	0.1814	0.0028	26.33	10	2.2477	0.0028
54	2.4655	2.2266	2.3964	18.54	7	2.2032	3	0.1913	0.0030	26.37	10	2.3945	0.0030
56	2.6216	2.3834	2.5471	18.84	7	2.3436	3	0.2014	0.0032	26.41	10	2.5450	0.0032
58	2.7815	2.5432	2.7012	19.12	7	2.4874	3	0.2116	0.0033	26.45	10	2.6990	0.0033
60	2.9452	2.7061	2.8590	19.37	7	2.6346	3	0.2219	0.0035	26.49	10	2.8565	0.0035

Total Height - 28 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
30	0.9060		0.8847			0.0000	9	0.8749	0.0115	25.51	9	0.8749	0.0115
32	1.0124	0.0450	0.9883			0.0000	9	0.9773	0.0126	25.63	9	0.9773	0.0126
34	1.1234	0.2237	1.0963	3.23	1	0.1956	9	0.9006	0.0016	25.73	10	1.0962	0.0016
36	1.2388	0.4877	1.2086	6.42	2	0.4128	8	0.7955	0.0017	25.83	10	1.2083	0.0017
38	1.3586	0.7246	1.3249	8.91	3	0.6533	7	0.6712	0.0019	25.91	10	1.3245	0.0019
40	1.4827	0.9203	1.4454	10.59	4	0.9109	6	0.5338	0.0020	25.99	10	1.4447	0.0020
42	1.6110	1.0967	1.5698	11.84	4	0.9945	6	0.5745	0.0021	26.05	10	1.5690	0.0021
44	1.7434	1.2639	1.6981	12.84	4	1.0812	6	0.6159	0.0023	26.12	10	1.6971	0.0023
46	1.8799	1.4268	1.8303	13.66	5	1.3791	5	0.4500	0.0024	26.18	10	1.8291	0.0024
48	2.0204	1.5879	1.9663	14.35	5	1.4860	5	0.4789	0.0026	26.23	10	1.9649	0.0026
50	2.1648	1.7487	2.1060	14.96	5	1.5962	5	0.5083	0.0027	26.28	10	2.1045	0.0027
52	2.3132	1.9103	2.2494	15.50	5	1.7095	5	0.5381	0.0028	26.33	10	2.2477	0.0028
54	2.4655	2.0731	2.3964	15.97	6	2.0417	4	0.3529	0.0030	26.37	10	2.3945	0.0030
56	2.6216	2.2376	2.5471	16.40	6	2.1733	4	0.3717	0.0032	26.41	10	2.5450	0.0032
58	2.7815	2.4042	2.7012	16.79	6	2.3082	4	0.3907	0.0033	26.45	10	2.6990	0.0033
60	2.9452	2.5731	2.8590	17.15	6	2.4464	4	0.4101	0.0035	26.49	10	2.8565	0.0035

Total Height - 28 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark)		Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
30	0.9060		0.8847				9	0.8749	0.0115	25.51	9	0.8749	0.0115
32	1.0124		0.9883				9	0.9773	0.0126	25.63	9	0.9773	0.0126
34	1.1234		1.0963				10	1.0962	0.0016	25.73	10	1.0962	0.0016
36	1.2388		1.2086				10	1.2083	0.0017	25.83	10	1.2083	0.0017
38	1.3586	0.1159	1.3249				10	1.3245	0.0019	25.91	10	1.3245	0.0019
40	1.4827	0.2998	1.4454	3.15	1	0.2701	9	1.1746	0.0020	25.99	10	1.4447	0.0020
42	1.6110	0.5426	1.5698	5.26	1	0.2976	9	1.2714	0.0021	26.05	10	1.5690	0.0021
44	1.7434	0.7996	1.6981	7.32	2	0.6054	8	1.0917	0.0023	26.12	10	1.6971	0.0023
46	1.8799	1.0323	1.8303	8.96	3	0.9295	7	0.8996	0.0024	26.18	10	1.8291	0.0024
48	2.0204	1.2429	1.9663	10.24	3	1.0052	7	0.9597	0.0026	26.23	10	1.9649	0.0026
50	2.1648	1.4398	2.1060	11.27	4	1.3595	6	0.7450	0.0027	26.28	10	2.1045	0.0027
52	2.3132	1.6289	2.2494	12.13	4	1.4581	6	0.7895	0.0028	26.33	10	2.2477	0.0028
54	2.4655	1.8135	2.3964	12.87	4	1.5597	6	0.8348	0.0030	26.37	10	2.3945	0.0030
56	2.6216	1.9958	2.5471	13.51	5	1.9458	5	0.5992	0.0032	26.41	10	2.5450	0.0032
58	2.7815	2.1773	2.7012	14.07	5	2.0686	5	0.6304	0.0033	26.45	10	2.6990	0.0033
60	2.9452	2.3587	2.8590	14.58	5	2.1945	5	0.6620	0.0035	26.49	10	2.8565	0.0035

Red Pine Sawlog and Pulp Volume Estimates

30 metre

Total Height - 30 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.3463	1.3047	1.3163	25.21	9	1.2818	1	0.0264	0.0096	27.71	10	1.3082	0.0096
38	1.4764	1.4319	1.4430	25.41	9	1.4056	1	0.0286	0.0104	27.80	10	1.4341	0.0104
40	1.6110	1.5635	1.5741	25.58	9	1.5337	1	0.0307	0.0112	27.88	10	1.5644	0.0112
42	1.7502	1.6993	1.7095	25.75	10	1.6989	0	0.0000	0.0119	27.95	10	1.6989	0.0119
44	1.8938	1.8392	1.8491	25.89	10	1.8377	0	0.0000	0.0127	28.02	10	1.8377	0.0127
46	2.0417	1.9833	1.9928	26.03	10	1.9805	0	0.0000	0.0135	28.08	10	1.9805	0.0135
48	2.1939	2.1313	2.1405	26.15	10	2.1274	0	0.0000	0.0144	28.14	10	2.1274	0.0144
50	2.3503	2.2834	2.2922	26.26	10	2.2783	0	0.0000	0.0152	28.19	10	2.2783	0.0152
52	2.5108	2.4393	2.4479	26.37	10	2.4331	1	0.0149	0.0012	28.24	11	2.4479	0.0012
54	2.6755	2.5991	2.6075	26.47	10	2.5917	1	0.0156	0.0012	28.29	11	2.6074	0.0012
56	2.8442	2.7627	2.7708	26.56	10	2.7542	1	0.0164	0.0013	28.33	11	2.7706	0.0013
58	3.0169	2.9300	2.9380	26.65	10	2.9205	1	0.0172	0.0014	28.37	11	2.9377	0.0014
60	3.1936	3.1011	3.1089	26.73	10	3.0904	1	0.0181	0.0014	28.41	11	3.1085	0.0014

Total Height - 30 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.3463	1.2695	1.3163	22.40	8	1.2316	2	0.0766	0.0096	27.71	10	1.3082	0.0096
38	1.4764	1.3985	1.4430	22.74	8	1.3513	2	0.0828	0.0104	27.80	10	1.4341	0.0104
40	1.6110	1.5317	1.5741	23.05	8	1.4753	2	0.0891	0.0112	27.88	10	1.5644	0.0112
42	1.7502	1.6689	1.7095	23.32	9	1.6660	1	0.0329	0.0119	27.95	10	1.6989	0.0119
44	1.8938	1.8101	1.8491	23.57	9	1.8026	1	0.0351	0.0127	28.02	10	1.8377	0.0127
46	2.0417	1.9553	1.9928	23.79	9	1.9431	1	0.0374	0.0135	28.08	10	1.9805	0.0135
48	2.1939	2.1044	2.1405	24.00	9	2.0877	1	0.0397	0.0144	28.14	10	2.1274	0.0144
50	2.3503	2.2574	2.2922	24.18	9	2.2363	1	0.0420	0.0152	28.19	10	2.2783	0.0152
52	2.5108	2.4141	2.4479	24.36	9	2.3887	2	0.0592	0.0012	28.24	11	2.4479	0.0012
54	2.6755	2.5747	2.6075	24.52	9	2.5450	2	0.0624	0.0012	28.29	11	2.6074	0.0012
56	2.8442	2.7391	2.7708	24.67	9	2.7051	2	0.0656	0.0013	28.33	11	2.7706	0.0013
58	3.0169	2.9071	2.9380	24.81	9	2.8689	2	0.0688	0.0014	28.37	11	2.9377	0.0014
60	3.1936	3.0788	3.1089	24.94	9	3.0364	2	0.0721	0.0014	28.41	11	3.1085	0.0014

Total Height - 30 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.3463	1.1888	1.3163	19.10	7	1.1545	3	0.1537	0.0096	27.71	10	1.3082	0.0096
38	1.4764	1.3233	1.4430	19.66	7	1.2678	3	0.1663	0.0104	27.80	10	1.4341	0.0104
40	1.6110	1.4610	1.5741	20.15	7	1.3853	3	0.1791	0.0112	27.88	10	1.5644	0.0112
42	1.7502	1.6021	1.7095	20.58	7	1.5067	3	0.1922	0.0119	27.95	10	1.6989	0.0119
44	1.8938	1.7467	1.8491	20.96	8	1.7356	2	0.1020	0.0127	28.02	10	1.8377	0.0127
46	2.0417	1.8948	1.9928	21.31	8	1.8718	2	0.1087	0.0135	28.08	10	1.9805	0.0135
48	2.1939	2.0465	2.1405	21.62	8	2.0120	2	0.1154	0.0144	28.14	10	2.1274	0.0144
50	2.3503	2.2018	2.2922	21.90	8	2.1560	2	0.1222	0.0152	28.19	10	2.2783	0.0152
52	2.5108	2.3607	2.4479	22.16	8	2.3039	3	0.1440	0.0012	28.24	11	2.4479	0.0012
54	2.6755	2.5232	2.6075	22.40	8	2.4556	3	0.1518	0.0012	28.29	11	2.6074	0.0012
56	2.8442	2.6893	2.7708	22.63	8	2.6109	3	0.1597	0.0013	28.33	11	2.7706	0.0013
58	3.0169	2.8590	2.9380	22.83	8	2.7700	3	0.1677	0.0014	28.37	11	2.9377	0.0014
60	3.1936	3.0322	3.1089	23.02	8	2.9327	3	0.1758	0.0014	28.41	11	3.1085	0.0014

Red Pine Sawlog and Pulp Volume Estimates

30 metre

Total Height - 30 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.3463	1.0167	1.3163	14.84	5	0.9200	5	0.3882	0.0096	27.71	10	1.3082	0.0096
38	1.4764	1.1687	1.4430	15.83	6	1.1545	4	0.2796	0.0104	27.80	10	1.4341	0.0104
40	1.6110	1.3197	1.5741	16.64	6	1.2628	4	0.3016	0.0112	27.88	10	1.5644	0.0112
42	1.7502	1.4714	1.7095	17.33	6	1.3750	4	0.3239	0.0119	27.95	10	1.6989	0.0119
44	1.8938	1.6247	1.8491	17.93	6	1.4910	4	0.3467	0.0127	28.02	10	1.8377	0.0127
46	2.0417	1.7801	1.9928	18.45	7	1.7615	3	0.2190	0.0135	28.08	10	1.9805	0.0135
48	2.1939	1.9380	2.1405	18.92	7	1.8947	3	0.2328	0.0144	28.14	10	2.1274	0.0144
50	2.3503	2.0987	2.2922	19.33	7	2.0316	3	0.2467	0.0152	28.19	10	2.2783	0.0152
52	2.5108	2.2624	2.4479	19.71	7	2.1722	4	0.2757	0.0012	28.24	11	2.4479	0.0012
54	2.6755	2.4291	2.6075	20.06	7	2.3166	4	0.2908	0.0012	28.29	11	2.6074	0.0012
56	2.8442	2.5989	2.7708	20.37	7	2.4645	4	0.3061	0.0013	28.33	11	2.7706	0.0013
58	3.0169	2.7720	2.9380	20.66	8	2.7700	3	0.1677	0.0014	28.37	11	2.9377	0.0014
60	3.1936	2.9483	3.1089	20.93	8	2.9327	3	0.1758	0.0014	28.41	11	3.1085	0.0014

Total Height - 30 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.3463	0.5584	1.3163	7.34	2	0.4159	8	0.8923	0.0096	27.71	10	1.3082	0.0096
38	1.4764	0.8160	1.4430	10.01	3	0.6623	7	0.7718	0.0104	27.80	10	1.4341	0.0104
40	1.6110	1.0255	1.5741	11.76	4	0.9301	6	0.6342	0.0112	27.88	10	1.5644	0.0112
42	1.7502	1.2147	1.7095	13.06	5	1.2101	5	0.4888	0.0119	27.95	10	1.6989	0.0119
44	1.8938	1.3946	1.8491	14.10	5	1.3140	5	0.5237	0.0127	28.02	10	1.8377	0.0127
46	2.0417	1.5701	1.9928	14.95	5	1.4213	5	0.5592	0.0135	28.08	10	1.9805	0.0135
48	2.1939	1.7440	2.1405	15.68	6	1.7341	4	0.3933	0.0144	28.14	10	2.1274	0.0144
50	2.3503	1.9177	2.2922	16.31	6	1.8611	4	0.4172	0.0152	28.19	10	2.2783	0.0152
52	2.5108	2.0922	2.4479	16.87	6	1.9916	5	0.4563	0.0012	28.24	11	2.4479	0.0012
54	2.6755	2.2682	2.6075	17.37	6	2.1257	5	0.4817	0.0012	28.29	11	2.6074	0.0012
56	2.8442	2.4461	2.7708	17.81	6	2.2632	5	0.5074	0.0013	28.33	11	2.7706	0.0013
58	3.0169	2.6261	2.9380	18.22	7	2.6160	4	0.3217	0.0014	28.37	11	2.9377	0.0014
60	3.1936	2.8086	3.1089	18.59	7	2.7711	4	0.3374	0.0014	28.41	11	3.1085	0.0014

Total Height - 30 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
36	1.3463		1.3163				10	1.3082	0.0096	27.71	10	1.3082	0.0096
38	1.4764	0.1173	1.4430				10	1.4341	0.0104	27.80	10	1.4341	0.0104
40	1.6110	0.3279	1.5741	3.43	1	0.2704	9	1.2940	0.0112	27.88	10	1.5644	0.0112
42	1.7502	0.6132	1.7095	5.94	2	0.5588	8	1.1401	0.0119	27.95	10	1.6989	0.0119
44	1.8938	0.9033	1.8491	8.27	3	0.8695	7	0.9682	0.0127	28.02	10	1.8377	0.0127
46	2.0417	1.1562	1.9928	10.03	3	0.9440	7	1.0365	0.0135	28.08	10	1.9805	0.0135
48	2.1939	1.3828	2.1405	11.37	4	1.2927	6	0.8347	0.0144	28.14	10	2.1274	0.0144
50	2.3503	1.5944	2.2922	12.45	4	1.3912	6	0.8871	0.0152	28.19	10	2.2783	0.0152
52	2.5108	1.7977	2.4479	13.35	5	1.7637	6	0.6842	0.0012	28.24	11	2.4479	0.0012
54	2.6755	1.9964	2.6075	14.12	5	1.8845	6	0.7229	0.0012	28.29	11	2.6074	0.0012
56	2.8442	2.1927	2.7708	14.78	5	2.0085	6	0.7622	0.0013	28.33	11	2.7706	0.0013
58	3.0169	2.3883	2.9380	15.37	5	2.1358	6	0.8019	0.0014	28.37	11	2.9377	0.0014
60	3.1936	2.5839	3.1089	15.90	6	2.5486	5	0.5599	0.0014	28.41	11	3.1085	0.0014

Red Pine Sawlog and Pulp Volume Estimates

32 metre

Total Height - 32 m | **Sawlog Upper Diameter - 10 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.3721	2.3097	2.3193	27.97	10	2.2813	1	0.0304	0.0089	30.05	11	2.3117	0.0089
50	2.5408	2.4742	2.4835	28.09	10	2.4432	1	0.0322	0.0094	30.10	11	2.4754	0.0094
52	2.7140	2.6429	2.6519	28.20	10	2.6092	1	0.0340	0.0099	30.16	11	2.6432	0.0099
54	2.8916	2.8157	2.8244	28.30	11	2.8152	0	0.0000	0.0105	30.20	11	2.8152	0.0105
56	3.0734	2.9925	3.0010	28.40	11	2.9912	0	0.0000	0.0110	30.25	11	2.9912	0.0110
58	3.2595	3.1733	3.1817	28.49	11	3.1713	0	0.0000	0.0115	30.29	11	3.1713	0.0115
60	3.4497	3.3581	3.3662	28.57	11	3.3553	0	0.0000	0.0121	30.33	11	3.3553	0.0121

Total Height - 32 m | **Sawlog Upper Diameter - 15 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.3721	2.2815	2.3193	25.71	10	2.2813	1	0.0304	0.0089	30.05	11	2.3117	0.0089
50	2.5408	2.4470	2.4835	25.91	10	2.4432	1	0.0322	0.0094	30.10	11	2.4754	0.0094
52	2.7140	2.6166	2.6519	26.09	10	2.6092	1	0.0340	0.0099	30.16	11	2.6432	0.0099
54	2.8916	2.7902	2.8244	26.26	10	2.7794	1	0.0358	0.0105	30.20	11	2.8152	0.0105
56	3.0734	2.9678	3.0010	26.42	10	2.9536	1	0.0376	0.0110	30.25	11	2.9912	0.0110
58	3.2595	3.1493	3.1817	26.56	10	3.1318	1	0.0395	0.0115	30.29	11	3.1713	0.0115
60	3.4497	3.3348	3.3662	26.70	10	3.3139	1	0.0414	0.0121	30.33	11	3.3553	0.0121

Total Height - 32 m | **Sawlog Upper Diameter - 20 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 20 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.3721	2.2210	2.3193	23.22	9	2.2189	2	0.0928	0.0089	30.05	11	2.3117	0.0089
50	2.5408	2.3889	2.4835	23.52	9	2.3771	2	0.0982	0.0094	30.10	11	2.4754	0.0094
52	2.7140	2.5607	2.6519	23.79	9	2.5395	2	0.1038	0.0099	30.16	11	2.6432	0.0099
54	2.8916	2.7363	2.8244	24.04	9	2.7058	2	0.1094	0.0105	30.20	11	2.8152	0.0105
56	3.0734	2.9157	3.0010	24.27	9	2.8762	2	0.1150	0.0110	30.25	11	2.9912	0.0110
58	3.2595	3.0989	3.1817	24.49	9	3.0505	2	0.1208	0.0115	30.29	11	3.1713	0.0115
60	3.4497	3.2859	3.3662	24.69	9	3.2287	2	0.1266	0.0121	30.33	11	3.3553	0.0121

Total Height - 32 m | **Sawlog Upper Diameter - 25 cm** | **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam	Sawlog, Pulp & Unmerchantable Volume: Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume: Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.3721	2.1076	2.3193	20.40	7	1.9763	4	0.3354	0.0089	30.05	11	2.3117	0.0089
50	2.5408	2.2812	2.4835	20.84	8	2.2704	3	0.2050	0.0094	30.10	11	2.4754	0.0094
52	2.7140	2.4579	2.6519	21.23	8	2.4266	3	0.2166	0.0099	30.16	11	2.6432	0.0099
54	2.8916	2.6378	2.8244	21.59	8	2.5867	3	0.2284	0.0105	30.20	11	2.8152	0.0105
56	3.0734	2.8212	3.0010	21.92	8	2.7508	3	0.2404	0.0110	30.25	11	2.9912	0.0110
58	3.2595	3.0079	3.1817	22.22	8	2.9188	3	0.2525	0.0115	30.29	11	3.1713	0.0115
60	3.4497	3.1981	3.3662	22.50	8	3.0905	3	0.2648	0.0121	30.33	11	3.3553	0.0121

Red Pine Sawlog and Pulp Volume Estimates

Total Height - 30 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
26	1.3463	1.0167	1.3163	14.84	5	0.9200	5	0.3862	0.0096	27.71	10	1.3062	0.0096
28	1.4764	1.1687	1.4430	15.63	6	1.1545	4	0.2796	0.0104	27.80	10	1.4341	0.0104
30	1.6110	1.3197	1.5741	16.64	6	1.2626	4	0.3016	0.0112	27.88	10	1.5644	0.0112
32	1.7502	1.4714	1.7095	17.33	6	1.3750	4	0.3239	0.0119	27.95	10	1.6969	0.0119
34	1.8938	1.6247	1.8491	17.93	6	1.4910	4	0.3467	0.0127	28.02	10	1.8377	0.0127
36	2.0417	1.7801	1.9928	18.45	7	1.7615	3	0.2190	0.0135	28.08	10	1.9805	0.0135
38	2.1939	1.9380	2.1405	18.92	7	1.8947	3	0.2328	0.0144	28.14	10	2.1274	0.0144
40	2.3503	2.0987	2.2922	19.33	7	2.0316	3	0.2467	0.0152	28.19	10	2.2783	0.0152
42	2.5108	2.2624	2.4479	19.71	7	2.1722	4	0.2757	0.0012	28.24	11	2.4479	0.0012
44	2.6755	2.4291	2.6075	20.06	7	2.3166	4	0.2908	0.0012	28.29	11	2.6074	0.0012
46	2.8442	2.5989	2.7708	20.37	7	2.4645	4	0.3061	0.0013	28.33	11	2.7706	0.0013
48	3.0169	2.7720	2.9380	20.66	8	2.7700	3	0.1677	0.0014	28.37	11	2.9377	0.0014
50	3.1936	2.9483	3.1089	20.93	8	2.9327	3	0.1758	0.0014	28.41	11	3.1085	0.0014

Total Height - 30 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
26	1.3463	0.5584	1.3163	7.34	2	0.4159	8	0.8923	0.0096	27.71	10	1.3062	0.0096
28	1.4764	0.8160	1.4430	10.01	3	0.6623	7	0.7718	0.0104	27.80	10	1.4341	0.0104
30	1.6110	1.0255	1.5741	11.76	4	0.9301	6	0.6342	0.0112	27.88	10	1.5644	0.0112
32	1.7502	1.2147	1.7095	13.06	5	1.2101	5	0.4888	0.0119	27.95	10	1.6969	0.0119
34	1.8938	1.3946	1.8491	14.10	5	1.3140	5	0.5237	0.0127	28.02	10	1.8377	0.0127
36	2.0417	1.5701	1.9928	14.95	5	1.4213	5	0.5592	0.0135	28.08	10	1.9805	0.0135
38	2.1939	1.7440	2.1405	15.68	6	1.7341	4	0.3933	0.0144	28.14	10	2.1274	0.0144
40	2.3503	1.9177	2.2922	16.31	6	1.8611	4	0.4172	0.0152	28.19	10	2.2783	0.0152
42	2.5108	2.0922	2.4479	16.87	6	1.9916	5	0.4563	0.0012	28.24	11	2.4479	0.0012
44	2.6755	2.2682	2.6075	17.37	6	2.1257	5	0.4817	0.0012	28.29	11	2.6074	0.0012
46	2.8442	2.4461	2.7708	17.81	6	2.2632	5	0.5074	0.0013	28.33	11	2.7706	0.0013
48	3.0169	2.6261	2.9380	18.22	7	2.6160	4	0.3217	0.0014	28.37	11	2.9377	0.0014
50	3.1936	2.8086	3.1089	18.59	7	2.7711	4	0.3374	0.0014	28.41	11	3.1085	0.0014

Total Height - 30 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 35 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam. (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
26	1.3463		1.3163				10	1.3062	0.0096	27.71	10	1.3062	0.0096
28	1.4764	0.1173	1.4430				10	1.4341	0.0104	27.80	10	1.4341	0.0104
30	1.6110	0.3279	1.5741	3.43	1	0.2704	9	1.2940	0.0112	27.88	10	1.5644	0.0112
32	1.7502	0.6132	1.7095	5.94	2	0.5588	8	1.1401	0.0119	27.95	10	1.6969	0.0119
34	1.8938	0.9033	1.8491	8.27	3	0.8695	7	0.9682	0.0127	28.02	10	1.8377	0.0127
36	2.0417	1.1562	1.9928	10.03	3	0.9440	7	1.0365	0.0135	28.08	10	1.9805	0.0135
38	2.1939	1.3628	2.1405	11.37	4	1.2927	6	0.8347	0.0144	28.14	10	2.1274	0.0144
40	2.3503	1.5944	2.2922	12.45	4	1.3912	6	0.8871	0.0152	28.19	10	2.2783	0.0152
42	2.5108	1.7977	2.4479	13.35	5	1.7637	6	0.6842	0.0012	28.24	11	2.4479	0.0012
44	2.6755	1.9964	2.6075	14.12	5	1.8645	6	0.7229	0.0012	28.29	11	2.6074	0.0012
46	2.8442	2.1927	2.7708	14.78	5	2.0085	6	0.7622	0.0013	28.33	11	2.7706	0.0013
48	3.0169	2.3883	2.9380	15.37	5	2.1358	6	0.8019	0.0014	28.37	11	2.9377	0.0014
50	3.1936	2.5839	3.1089	15.90	6	2.5486	5	0.5599	0.0014	28.41	11	3.1085	0.0014

Red Pine Sawlog and Pulp Volume Estimates

									Pulp & Unmerchantable Volume			
	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
	2.3721	2.3097	2.3193	27.97	10	2.2813	1	0.0304	0.0089	30.05	11	2.3117	0.0089
	2.5408	2.4742	2.4835	28.09	10	2.4432	1	0.0322	0.0094	30.10	11	2.4754	0.0094
	2.7140	2.6429	2.6519	28.20	10	2.6092	1	0.0340	0.0099	30.16	11	2.6432	0.0099
	2.8916	2.8157	2.8244	28.30	11	2.8152	0	0.0000	0.0105	30.20	11	2.8152	0.0105
	3.0734	2.9925	3.0010	28.40	11	2.9912	0	0.0000	0.0110	30.25	11	2.9912	0.0110
	3.2595	3.1733	3.1817	28.49	11	3.1713	0	0.0000	0.0115	30.29	11	3.1713	0.0115
	3.4497	3.3581	3.3662	28.57	11	3.3553	0	0.0000	0.0121	30.33	11	3.3553	0.0121

									Pulp & Unmerchantable Volume			
	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 15 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
	2.3721	2.2815	2.3193	25.71	10	2.2813	1	0.0304	0.0089	30.05	11	2.3117	0.0089
	2.5408	2.4470	2.4835	25.91	10	2.4432	1	0.0322	0.0094	30.10	11	2.4754	0.0094
	2.7140	2.6166	2.6519	26.09	10	2.6092	1	0.0340	0.0099	30.16	11	2.6432	0.0099
	2.8916	2.7902	2.8244	26.26	10	2.7794	1	0.0358	0.0105	30.20	11	2.8152	0.0105
	3.0734	2.9678	3.0010	26.42	10	2.9536	1	0.0376	0.0110	30.25	11	2.9912	0.0110
	3.2595	3.1493	3.1817	26.56	10	3.1318	1	0.0395	0.0115	30.29	11	3.1713	0.0115
	3.4497	3.3346	3.3662	26.70	10	3.3139	1	0.0414	0.0121	30.33	11	3.3553	0.0121

									Pulp & Unmerchantable Volume			
	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
	2.3721	2.2210	2.3193	23.22	9	2.2189	2	0.0928	0.0089	30.05	11	2.3117	0.0089
	2.5408	2.3869	2.4835	23.52	9	2.3771	2	0.0982	0.0094	30.10	11	2.4754	0.0094
	2.7140	2.5607	2.6519	23.79	9	2.5395	2	0.1038	0.0099	30.16	11	2.6432	0.0099
	2.8916	2.7363	2.8244	24.04	9	2.7058	2	0.1094	0.0105	30.20	11	2.8152	0.0105
	3.0734	2.9157	3.0010	24.27	9	2.8762	2	0.1150	0.0110	30.25	11	2.9912	0.0110
	3.2595	3.0989	3.1817	24.49	9	3.0505	2	0.1208	0.0115	30.29	11	3.1713	0.0115
	3.4497	3.2859	3.3662	24.69	9	3.2287	2	0.1266	0.0121	30.33	11	3.3553	0.0121

									Pulp & Unmerchantable Volume			
	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 25 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)				
	2.3721	2.1076	2.3193	20.40	7	1.9763	4	0.3354	0.0089	30.05	11	2.3117	0.0089
	2.5408	2.2612	2.4835	20.84	8	2.2704	3	0.2050	0.0094	30.10	11	2.4754	0.0094
	2.7140	2.4579	2.6519	21.23	8	2.4266	3	0.2166	0.0099	30.16	11	2.6432	0.0099
	2.8916	2.6378	2.8244	21.59	8	2.5867	3	0.2284	0.0105	30.20	11	2.8152	0.0105
	3.0734	2.8212	3.0010	21.92	8	2.7508	3	0.2404	0.0110	30.25	11	2.9912	0.0110
	3.2595	3.0079	3.1817	22.22	8	2.9188	3	0.2525	0.0115	30.29	11	3.1713	0.0115
	3.4497	3.1981	3.3662	22.50	8	3.0905	3	0.2648	0.0121	30.33	11	3.3553	0.0121

Red Pine Sawlog and Pulp Volume Estimates

12 metre

Total Height - 32 m | **Sawlog Upper Diameter - 30 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.3721	1.9054	2.3193	17.03	6	1.7935	5	0.5182	0.0089	30.05	11	2.3117	0.0089
50	2.5408	2.0924	2.4835	17.68	6	1.9255	5	0.5499	0.0094	30.10	11	2.4754	0.0094
52	2.7140	2.2803	2.6519	18.26	7	2.2672	4	0.3760	0.0099	30.16	11	2.6432	0.0099
54	2.8916	2.4699	2.8244	18.78	7	2.4184	4	0.3968	0.0105	30.20	11	2.8152	0.0105
56	3.0734	2.6615	3.0010	19.25	7	2.5734	4	0.4178	0.0110	30.25	11	2.9912	0.0110
58	3.2595	2.8556	3.1817	19.67	7	2.7322	4	0.4391	0.0115	30.29	11	3.1713	0.0115
60	3.4497	3.0522	3.3662	20.06	7	2.8946	4	0.4607	0.0121	30.33	11	3.3553	0.0121

Total Height - 32 m | **Sawlog Upper Diameter - 35 cm** | **Stump height - 0.3 m**

				Sawlog, Pulp & Unmerchantable Volume						Pulp & Unmerchantable Volume			
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 10 cm upper (m^3)	Gross Merchantable Volume (inside bark) 5 cm upper diam (m^3)	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Height location of 5 cm upper inside bark diameter (m)	No. of 2.54 m (8 foot) pulp logs	Gross Merch. volume of all pulp logs (m^3)	Remaining Unmerch. volume after pulp logs removed (m^3)
48	2.3721	1.5295	2.3193	12.55	4	1.3182	7	0.9935	0.0089	30.05	11	2.3117	0.0089
50	2.5408	1.7558	2.4835	13.67	5	1.6904	6	0.7850	0.0094	30.10	11	2.4754	0.0094
52	2.7140	1.9736	2.6519	14.60	5	1.8117	6	0.8315	0.0099	30.16	11	2.6432	0.0099
54	2.8916	2.1866	2.8244	15.39	5	1.9364	6	0.8788	0.0105	30.20	11	2.8152	0.0105
56	3.0734	2.3974	3.0010	16.09	6	2.3437	5	0.6476	0.0110	30.25	11	2.9912	0.0110
58	3.2595	2.6074	3.1817	16.70	6	2.4903	5	0.6810	0.0115	30.29	11	3.1713	0.0115
60	3.4497	2.8177	3.3662	17.25	6	2.6404	5	0.7149	0.0121	30.33	11	3.3553	0.0121

Red Pine Sawlog and Pulp Volume Estimates

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	2.3721	1.9054	2.3193	17.03	6	1.7935	5	0.5182	0.0089	30.05	11	2.3117	0.0089
	2.5408	2.0924	2.4835	17.66	6	1.9255	5	0.5499	0.0094	30.10	11	2.4754	0.0094
	2.7140	2.2803	2.6519	18.26	7	2.2672	4	0.3760	0.0099	30.16	11	2.6432	0.0099
	2.8916	2.4699	2.8244	18.78	7	2.4184	4	0.3968	0.0105	30.20	11	2.8152	0.0105
	3.0734	2.6615	3.0010	19.25	7	2.5734	4	0.4178	0.0110	30.25	11	2.9912	0.0110
	3.2595	2.8556	3.1817	19.67	7	2.7322	4	0.4391	0.0115	30.29	11	3.1713	0.0115
	3.4497	3.0522	3.3662	20.06	7	2.8946	4	0.4607	0.0121	30.33	11	3.3553	0.0121

	Gross Total Volume (inside bark) (m^3)	Gross Merchantable Volume (inside bark) 30 cm upper	Gross Merchantable Volume (inside bark) 5 cm upper diam.	Height location of sawlog upper inside bark diameter (m)	No. of 2.54 m (8 foot) sawlogs	Gross Merch. volume of all sawlogs (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting sawlogs	Gross Merch. volume of pulp logs after extracting sawlogs (m^3)	Remaining Unmerch. volume after sawlogs and pulp logs removed (m^3)	Pulp & Unmerchantable Volume			
	2.3721	1.5295	2.3193	12.55	4	1.3182	7	0.9935	0.0089	30.05	11	2.3117	0.0089
	2.5408	1.7558	2.4835	13.67	5	1.6904	6	0.7850	0.0094	30.10	11	2.4754	0.0094
	2.7140	1.9736	2.6519	14.80	5	1.8117	6	0.8315	0.0099	30.16	11	2.6432	0.0099
	2.8916	2.1866	2.8244	15.39	5	1.9364	6	0.8788	0.0105	30.20	11	2.8152	0.0105
	3.0734	2.3974	3.0010	16.09	6	2.3437	5	0.6476	0.0110	30.25	11	2.9912	0.0110
	3.2595	2.6074	3.1817	16.70	6	2.4903	5	0.6810	0.0115	30.29	11	3.1713	0.0115
	3.4497	2.8177	3.3662	17.25	6	2.6404	5	0.7149	0.0121	30.33	11	3.3553	0.0121

Appendix B-2
Red Pine Utility Pole and Pulp Volume Tables

Red Pine Utility Poles

(Maximized for Pole Class)

Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
0.2396	6	20.0-24.9	6.10-7.59	0.1925	1	0.0299	0.0084
0.2802	5	20.0-24.9	6.10-7.59	0.2185	1	0.0346	0.0127
0.3236	4	20.0-24.9	6.10-7.59	0.2450	2	0.0599	0.0015
0.3699	3	20.0-24.9	6.10-7.59	0.2717	2	0.0752	0.0020

Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
0.3225	7	30.0-34.9	9.14-10.64	0.2862	1	0.0189	0.0036
0.3717	5	25.0-29.9	7.62-9.11	0.3082	1	0.0343	0.0128
0.4240	3	20.0-24.9	6.10-7.59	0.3175	2	0.0813	0.0059
0.4793	2	20.0-24.9	6.10-7.59	0.3482	2	0.0995	0.0092
0.5376	1	20.0-24.9	6.10-7.59	0.3787	2	0.1196	0.0134
0.5989	1	20.0-24.9	6.10-7.59	0.4486	2	0.1121	0.0086
0.6631	1	25.0-29.9	7.62-9.11	0.5184	2	0.1055	0.0055
0.7303	1	25.0-29.9	7.62-9.11	0.5891	2	0.0997	0.0034
0.8004	1	25.0-29.9	7.62-9.11	0.6611	2	0.0945	0.0021
0.8735	1	30.0-34.9	9.14-10.64	0.7347	2	0.0898	0.0012
0.9495	1	30.0-34.9	9.14-10.64	0.8103	1	0.0662	0.0200
1.0284	1	30.0-34.9	9.14-10.64	0.8878	1	0.0647	0.0173

Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
0.4815	6	35.0-39.9	10.67-12.16	0.4308	1	0.0255	0.0095
0.5435	4	30.0-34.9	9.14-10.64	0.4600	2	0.0598	0.0020
0.6087	2	25.0-29.9	7.62-9.11	0.4757	2	0.0986	0.0095
0.6771	1	25.0-29.9	7.62-9.11	0.5158	2	0.1189	0.0140
0.7486	2	30.0-34.9	9.14-10.64	0.6242	2	0.0881	0.0041
0.8233	1	30.0-34.9	9.14-10.64	0.6732	2	0.1070	0.0067
0.9010	1	30.0-34.9	9.14-10.64	0.7537	2	0.1020	0.0046
0.9818	1	30.0-34.9	9.14-10.64	0.8359	2	0.0975	0.0031
1.0657	1	35.0-39.9	10.67-12.16	0.9201	2	0.0933	0.0020
1.1527	1	35.0-39.9	10.67-12.16	1.0065	2	0.0894	0.0013
1.2427	1	35.0-39.9	10.67-12.16	1.0950	1	0.0661	0.0205
1.3358	1	35.0-39.9	10.67-12.16	1.1858	1	0.0648	0.0181
1.4319	1	35.0-39.9	10.67-12.16	1.2791	1	0.0636	0.0160
1.5310	1	35.0-39.9	10.67-12.16	1.3747	1	0.0624	0.0142
1.6332	1	40.0-44.9	12.19-13.69	1.4726	1	0.0613	0.0126
1.7385	1	40.0-44.9	12.19-13.69	1.5733	1	0.0602	0.0112
1.8467	1	40.0-44.9	12.19-13.69	1.6764	1	0.0591	0.0099

Red Pine Utility Poles

(Maximized for Pole Class)

Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
0.5417	6	40.0-44.9	12.19-13.69	0.4889	1	0.0253	0.0063
0.6109	6	45.0-49.9	13.72-15.21	0.5577	1	0.0255	0.0068
0.6836	5	40.0-44.9	12.19-13.69	0.6155	1	0.0330	0.0109
0.7596	3	35.0-39.9	10.67-12.16	0.6525	2	0.0755	0.0041
0.8390	4	40.0-44.9	12.19-13.69	0.7534	1	0.0406	0.0139
0.9217	2	35.0-39.9	10.67-12.16	0.7929	2	0.0990	0.0048
1.0077	1	35.0-39.9	10.67-12.16	0.8528	2	0.1081	0.0078
1.0969	1	35.0-39.9	10.67-12.16	0.9439	2	0.1037	0.0057
1.1894	1	40.0-44.9	12.19-13.69	1.0374	2	0.0997	0.0041
1.2851	1	40.0-44.9	12.19-13.69	1.1330	2	0.0959	0.0029
1.3840	1	40.0-44.9	12.19-13.69	1.2311	2	0.0924	0.0020
1.4861	1	40.0-44.9	12.19-13.69	1.3316	2	0.0891	0.0014
1.5914	1	40.0-44.9	12.19-13.69	1.4345	2	0.0860	0.0009
1.6998	1	40.0-44.9	12.19-13.69	1.5401	1	0.0649	0.0188
1.8114	1	40.0-44.9	12.19-13.69	1.6482	1	0.0639	0.0169
1.9261	1	45.0-49.9	13.72-15.21	1.7589	1	0.0629	0.0152
2.0440	1	45.0-49.9	13.72-15.21	1.8722	1	0.0619	0.0137

Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
0.8459	5	45.0-49.9	13.72-15.21	0.7748	1	0.0331	0.0112
0.9337	4	45.0-49.9	13.72-15.21	0.8448	2	0.0570	0.0015
1.0250	3	45.0-49.9	13.72-15.21	0.9155	2	0.0723	0.0031
1.1198	3	45.0-49.9	13.72-15.21	1.0103	2	0.0693	0.0021
1.2180	1	40.0-44.9	12.19-13.69	1.0580	2	0.1090	0.0089
1.3197	1	40.0-44.9	12.19-13.69	1.1612	2	0.1050	0.0067
1.4249	1	45.0-49.9	13.72-15.21	1.2668	2	0.1014	0.0050
1.5332	1	45.0-49.9	13.72-15.21	1.3749	2	0.0980	0.0038
1.6450	1	45.0-49.9	13.72-15.21	1.4856	2	0.0948	0.0028
1.7601	1	45.0-49.9	13.72-15.21	1.5989	2	0.0918	0.0020
1.8786	1	45.0-49.9	13.72-15.21	1.7150	2	0.0889	0.0015
2.0003	1	45.0-49.9	13.72-15.21	1.8337	2	0.0862	0.0010
2.1253	1	50.0-54.9	15.24-16.73	1.9552	1	0.0650	0.0194
2.2536	1	50.0-54.9	15.24-16.73	2.0795	1	0.0641	0.0178

Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
0.9356	5	50.0-54.9	15.24-16.73	0.8621	1	0.0339	0.0133
1.1325	4	50.0-54.9	15.24-16.73	1.0402	2	0.0573	0.0017
1.2366	3	50.0-54.9	15.24-16.73	1.1233	2	0.0727	0.0034
1.3444	2	50.0-54.9	15.24-16.73	1.2070	2	0.0902	0.0080
1.4559	1	45.0-49.9	13.72-15.21	1.2910	2	0.1096	0.0096
1.5709	1	50.0-54.9	15.24-16.73	1.4070	2	0.1081	0.0075
1.6895	1	50.0-54.9	15.24-16.73	1.5257	2	0.1028	0.0059
1.8116	1	50.0-54.9	15.24-16.73	1.6472	2	0.0987	0.0046
1.9372	1	50.0-54.9	15.24-16.73	1.7715	2	0.0957	0.0036
2.0663	1	50.0-54.9	15.24-16.73	1.8986	2	0.0939	0.0027
2.1989	1	55.0-59.9	16.76-18.26	2.0286	2	0.0913	0.0021
2.3349	1	55.0-59.9	16.76-18.26	2.1615	2	0.0888	0.0015
2.4743	1	55.0-59.9	16.76-18.26	2.2974	2	0.0864	0.0011

Red Pine Utility Poles

(Maximized for Pole Class)

14 metre

Total Height - 14 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
22	0.2396	6	20.0-24.9	6.10-7.59	0.1925	1	0.0269	0.0084
24	0.2802	5	20.0-24.9	6.10-7.59	0.2185	1	0.0346	0.0127
26	0.3236	4	20.0-24.9	6.10-7.59	0.2450	2	0.0599	0.0015
28	0.3699	3	20.0-24.9	6.10-7.59	0.2717	2	0.0752	0.0028

16 metre

Total Height - 16 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
24	0.3225	7	30.0-34.9	9.14-10.64	0.2862	1	0.0189	0.0036
26	0.3717	5	25.0-29.9	7.62-9.11	0.3082	1	0.0343	0.0128
28	0.4240	3	20.0-24.2	6.10-7.59	0.3175	2	0.0813	0.0059
30	0.4793	2	20.0-24.9	6.10-7.59	0.3482	2	0.0995	0.0092
32	0.5376	1	20.0-24.9	6.10-7.59	0.3787	2	0.1196	0.0134
34	0.5989	1	20.0-24.9	6.10-7.59	0.4486	2	0.1121	0.0086
36	0.6631	1	25.0-29.9	7.62-9.11	0.5184	2	0.1055	0.0055
38	0.7303	1	25.0-29.9	7.62-9.11	0.5891	2	0.0997	0.0034
40	0.8004	1	25.0-29.9	7.62-9.11	0.6611	2	0.0945	0.0021
42	0.8735	1	30.0-34.9	9.14-10.64	0.7347	2	0.0898	0.0012
44	0.9495	1	30.0-34.9	9.14-10.64	0.8103	1	0.0662	0.0200
46	1.0284	1	30.0-34.9	9.14-10.64	0.8878	1	0.0647	0.0173

18 metre

Total Height - 18 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
28	0.4815	6	35.0-39.9	10.67-12.16	0.4308	1	0.0255	0.0065
30	0.5435	4	30.0-34.9	9.14-10.64	0.4600	2	0.0598	0.0020
32	0.6087	2	25.0-29.9	7.62-9.11	0.4757	2	0.0986	0.0095
34	0.6771	1	25.0-29.9	7.62-9.11	0.5158	2	0.1189	0.0140
36	0.7486	2	30.0-34.9	9.14-10.64	0.6242	2	0.0881	0.0041
38	0.8233	1	30.0-34.9	9.14-10.64	0.6732	2	0.1070	0.0067
40	0.9010	1	30.0-34.9	9.14-10.64	0.7537	2	0.1020	0.0046
42	0.9818	1	30.0-34.9	9.14-10.64	0.8359	2	0.0975	0.0031
44	1.0657	1	35.0-39.9	10.67-12.16	0.9201	2	0.0933	0.0020
46	1.1527	1	35.0-39.9	10.67-12.16	1.0063	2	0.0894	0.0013
48	1.2427	1	35.0-39.9	10.67-12.16	1.0950	1	0.0661	0.0205
50	1.3358	1	35.0-39.9	10.67-12.16	1.1858	1	0.0648	0.0181
52	1.4319	1	35.0-39.9	10.67-12.16	1.2791	1	0.0636	0.0160
54	1.5310	1	35.0-39.9	10.67-12.16	1.3747	1	0.0624	0.0142
56	1.6332	1	40.0-44.9	12.19-13.69	1.4728	1	0.0613	0.0126
58	1.7385	1	40.0-44.9	12.19-13.69	1.5733	1	0.0602	0.0112
60	1.8467	1	40.0-44.9	12.19-13.69	1.6764	1	0.0591	0.0099

Red Pine Utility Poles

(Maximized for Pole Class)

20 metre

Total Height - 20 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
28	0.5417	6	40.0-44.9	12.19-13.69	0.4889	1	0.0263	0.0083
30	0.6109	6	45.0-49.9	13.72-15.21	0.5577	1	0.0255	0.0068
32	0.6836	5	40.0-44.9	12.19-13.69	0.6155	1	0.0330	0.0109
34	0.7596	3	35.0-39.9	10.67-12.16	0.6525	2	0.0755	0.0041
36	0.8390	4	40.0-44.9	12.19-13.69	0.7534	1	0.0406	0.0139
38	0.9217	2	35.0-39.9	10.67-12.16	0.7929	2	0.0890	0.0048
40	1.0077	1	35.0-39.9	10.67-12.16	0.8526	2	0.1081	0.0078
42	1.0969	1	35.0-39.9	10.67-12.16	0.9439	2	0.1037	0.0057
44	1.1894	1	40.0-44.9	12.19-13.69	1.0374	2	0.0997	0.0041
46	1.2851	1	40.0-44.9	12.19-13.69	1.1330	2	0.0959	0.0029
48	1.3840	1	40.0-44.9	12.19-13.69	1.2311	2	0.0924	0.0020
50	1.4861	1	40.0-44.9	12.19-13.69	1.3316	2	0.0891	0.0014
52	1.5914	1	40.0-44.9	12.19-13.69	1.4345	2	0.0860	0.0009
54	1.6998	1	40.0-44.9	12.19-13.69	1.5401	1	0.0649	0.0188
56	1.8114	1	40.0-44.9	12.19-13.69	1.6482	1	0.0639	0.0169
58	1.9261	1	45.0-49.9	13.72-15.21	1.7589	1	0.0629	0.0152
60	2.0440	1	45.0-49.9	13.72-15.21	1.8722	1	0.0619	0.0137

22 metre

Total Height - 22 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
34	0.8459	5	45.0-49.9	13.72-15.21	0.7748	1	0.0331	0.0112
36	0.9337	4	45.0-49.9	13.72-15.21	0.8448	2	0.0570	0.0015
38	1.0250	3	45.0-49.9	13.72-15.21	0.9155	2	0.0723	0.0031
40	1.1198	3	45.0-49.9	13.72-15.21	1.0103	2	0.0693	0.0021
42	1.2180	1	40.0-44.9	12.19-13.69	1.0580	2	0.1090	0.0088
44	1.3197	1	40.0-44.9	12.19-13.69	1.1612	2	0.1050	0.0067
46	1.4248	1	45.0-49.9	13.72-15.21	1.2668	2	0.1014	0.0050
48	1.5332	1	45.0-49.9	13.72-15.21	1.3749	2	0.0980	0.0038
50	1.6450	1	45.0-49.9	13.72-15.21	1.4856	2	0.0948	0.0028
52	1.7601	1	45.0-49.9	13.72-15.21	1.5989	2	0.0918	0.0020
54	1.8786	1	45.0-49.9	13.72-15.21	1.7150	2	0.0889	0.0015
56	2.0003	1	45.0-49.9	13.72-15.21	1.8337	2	0.0862	0.0010
58	2.1253	1	50.0-54.9	15.24-16.73	1.9552	1	0.0650	0.0194
60	2.2536	1	50.0-54.9	15.24-16.73	2.0795	1	0.0641	0.0176

24 metre

Total Height - 24 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
36	0.9356	5	50.0-54.9	15.24-16.73	0.8621	1	0.0339	0.0133
38	1.1325	4	50.0-54.9	15.24-16.73	1.0402	2	0.0573	0.0017
40	1.2366	3	50.0-54.9	15.24-16.73	1.1233	2	0.0727	0.0034
42	1.3444	2	50.0-54.9	15.24-16.73	1.2070	2	0.0902	0.0060
44	1.4559	1	45.0-49.9	13.72-15.21	1.2910	2	0.1096	0.0096
46	1.5709	1	50.0-54.9	15.24-16.73	1.4070	2	0.1061	0.0075
48	1.6895	1	50.0-54.9	15.24-16.73	1.5257	2	0.1028	0.0059
50	1.8116	1	50.0-54.9	15.24-16.73	1.6472	2	0.0997	0.0046
52	1.9372	1	50.0-54.9	15.24-16.73	1.7715	2	0.0967	0.0036
54	2.0663	1	50.0-54.9	15.24-16.73	1.8986	2	0.0939	0.0027
56	2.1989	1	55.0-59.9	16.76-18.26	2.0286	2	0.0913	0.0021
58	2.3349	1	55.0-59.9	16.76-18.26	2.1615	2	0.0888	0.0015
60	2.4743	1	55.0-59.9	16.76-18.26	2.2974	2	0.0864	0.0011

Red Pine Utility Poles

(Maximized for Pole Class)

26 metre

Total Height - 26 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
38	1.2439	4	55.0-59.9	16.76-18.26	1.1486	2	0.0599	0.0027
40	1.3578	4	60.0-64.9	18.29-19.78	1.2618	2	0.0576	0.0019
42	1.4756	3	55.0-59.9	16.76-18.26	1.3583	2	0.0731	0.0037
44	1.5973	2	55.0-59.9	16.76-18.26	1.4555	2	0.0906	0.0065
46	1.7228	2	55.0-59.9	16.76-18.26	1.5808	2	0.0878	0.0051
48	1.8521	1	55.0-59.9	16.76-18.26	1.6827	2	0.1070	0.0083
50	1.9851	1	55.0-59.9	16.76-18.26	1.8157	2	0.1039	0.0067
52	2.1218	1	55.0-59.9	16.76-18.26	1.9514	2	0.1011	0.0054
54	2.2622	1	55.0-59.9	16.76-18.26	2.0902	2	0.0984	0.0043
56	2.4063	1	60.0-64.9	18.29-19.78	2.2321	2	0.0958	0.0034
58	2.5539	1	60.0-64.9	18.29-19.78	2.3770	2	0.0933	0.0027
60	2.7051	1	60.0-64.9	18.29-19.78	2.5250	2	0.0910	0.0021

28 metre

Total Height - 28 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
40	1.4827	4	>=65.0	>=19.81	1.38399	2	0.0600	0.0028
42	1.6110	3	60.0-64.9	18.29-19.78	1.49009	2	0.0759	0.0052
44	1.7434	3	>=65.0	>=19.81	1.622	2	0.0734	0.0040
46	1.8799	2	60.0-64.9	18.29-19.78	1.73363	2	0.0910	0.0069
48	2.0204	1	60.0-64.9	18.29-19.78	1.84586	2	0.1106	0.0110
50	2.1648	1	60.0-64.9	18.29-19.78	1.99041	2	0.1077	0.0091
52	2.3132	1	60.0-64.9	18.29-19.78	2.13816	2	0.1049	0.0075
54	2.4655	1	60.0-64.9	18.29-19.78	2.28915	2	0.1022	0.0061
56	2.6216	1	>=65.0	>=19.81	2.4434	2	0.0997	0.0050
58	2.7815	1	>=65.0	>=19.81	2.6009	2	0.0973	0.0041
60	2.9452	1	>=65.0	>=19.81	2.76168	2	0.0950	0.0033

30 metre

Total Height - 30 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
40	1.6110	4	>=65.0	>=19.81	1.5097	2	0.0621	0.0038
42	1.7502	4	>=65.0	>=19.81	1.6480	2	0.0600	0.0029
44	1.8938	3	>=65.0	>=19.81	1.7691	2	0.0759	0.0054
46	2.0417	3	>=65.0	>=19.81	1.9161	2	0.0737	0.0042
48	2.1939	2	>=65.0	>=19.81	2.0431	2	0.0913	0.0073
50	2.3503	1	>=65.0	>=19.81	2.1708	2	0.1110	0.0116
52	2.5108	1	>=65.0	>=19.81	2.3311	2	0.1083	0.0097
54	2.6755	1	>=65.0	>=19.81	2.4948	2	0.1057	0.0081
56	2.8442	1	>=65.0	>=19.81	2.6619	2	0.1033	0.0068
58	3.0169	1	>=65.0	>=19.81	2.8325	2	0.1009	0.0057
60	3.1936	1	>=65.0	>=19.81	3.0066	2	0.0986	0.0047

32 metre

Total Height - 32 m **Stump height - 0.3 m**

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
48	2.3721	2	>=65.0	>=19.81	2.2174	2	0.0940	0.0092
50	2.5408	1	>=65.0	>=19.81	2.3565	2	0.1140	0.0143
52	2.7140	1	>=65.0	>=19.81	2.5296	2	0.1114	0.0121
54	2.8916	1	>=65.0	>=19.81	2.7065	2	0.1088	0.0103
56	3.0734	1	>=65.0	>=19.81	2.8870	2	0.1064	0.0088
58	3.2595	1	>=65.0	>=19.81	3.0712	2	0.1041	0.0074
60	3.4497	1	>=65.0	>=19.81	3.2592	2	0.1019	0.0063

Red Pine Utility Poles

(Maximized for Pole Class)

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
20	1.2439	4	55.0-59.9	16.76-18.26	1.1486	2	0.0599	0.0027
22	1.3578	4	60.0-64.9	18.29-19.78	1.2618	2	0.0578	0.0019
24	1.4756	3	55.0-59.9	16.76-18.26	1.3583	2	0.0731	0.0037
26	1.5973	2	55.0-59.9	16.76-18.26	1.4555	2	0.0906	0.0065
28	1.7228	2	55.0-59.9	16.76-18.26	1.5608	2	0.0878	0.0051
30	1.8521	1	55.0-59.9	16.76-18.26	1.6629	2	0.1070	0.0083
32	1.9851	1	55.0-59.9	16.76-18.26	1.8157	2	0.1039	0.0067
34	2.1218	1	55.0-59.9	16.76-18.26	1.9514	2	0.1011	0.0054
36	2.2622	1	55.0-59.9	16.76-18.26	2.0902	2	0.0984	0.0043
38	2.4063	1	60.0-64.9	18.29-19.78	2.2321	2	0.0958	0.0034
40	2.5539	1	60.0-64.9	18.29-19.78	2.3770	2	0.0933	0.0027
42	2.7051	1	60.0-64.9	18.29-19.78	2.5250	2	0.0910	0.0021

28 metre

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
20	1.4827	4	>=65.0	>=19.81	1.38399	2	0.0600	0.0028
22	1.6110	3	60.0-64.9	18.29-19.78	1.49009	2	0.0759	0.0052
24	1.7434	3	>=65.0	>=19.81	1.622	2	0.0734	0.0040
26	1.8799	2	60.0-64.9	18.29-19.78	1.73363	2	0.0910	0.0069
28	2.0204	1	60.0-64.9	18.29-19.78	1.84586	2	0.1106	0.0110
30	2.1648	1	60.0-64.9	18.29-19.78	1.99041	2	0.1077	0.0091
32	2.3132	1	60.0-64.9	18.29-19.78	2.13816	2	0.1049	0.0075
34	2.4655	1	60.0-64.9	18.29-19.78	2.28915	2	0.1022	0.0061
36	2.6216	1	>=65.0	>=19.81	2.4434	2	0.0997	0.0050
38	2.7815	1	>=65.0	>=19.81	2.6009	2	0.0973	0.0041
40	2.9452	1	>=65.0	>=19.81	2.76166	2	0.0950	0.0033

30 metre

Total Height - 30 m Stump height - 0.3 m

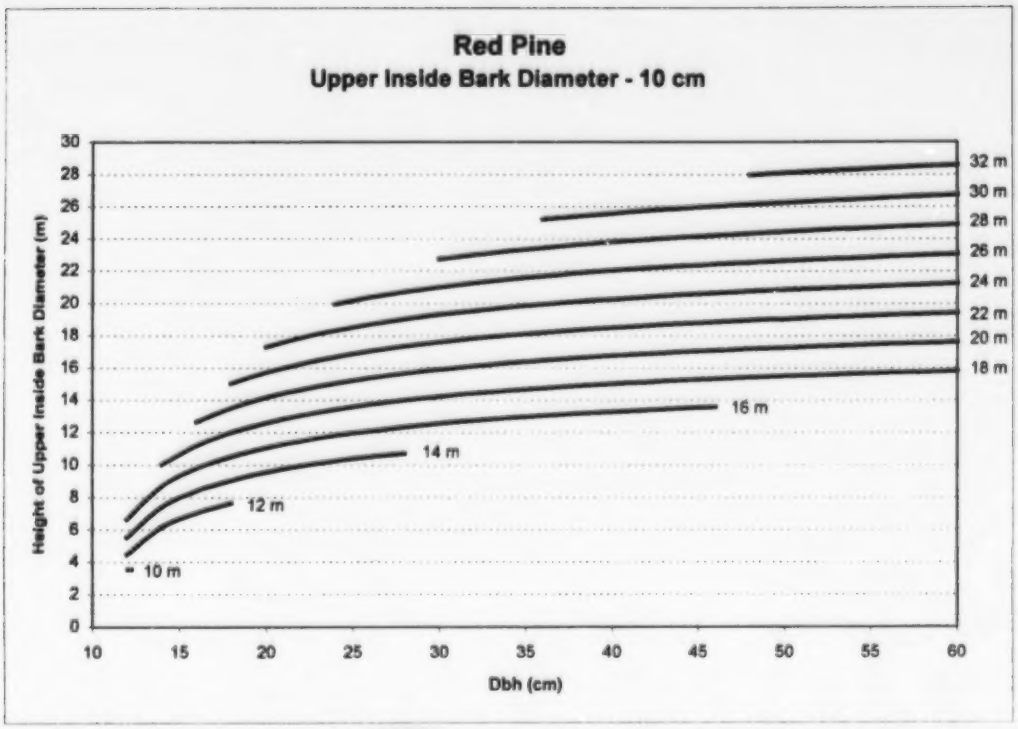
Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
20	1.6110	4	>=65.0	>=19.81	1.5097	2	0.0621	0.0038
22	1.7502	4	>=65.0	>=19.81	1.6480	2	0.0600	0.0029
24	1.8938	3	>=65.0	>=19.81	1.7691	2	0.0759	0.0054
26	2.0417	3	>=65.0	>=19.81	1.9161	2	0.0737	0.0042
28	2.1939	2	>=65.0	>=19.81	2.0431	2	0.0913	0.0073
30	2.3503	1	>=65.0	>=19.81	2.1708	2	0.1110	0.0116
32	2.5108	1	>=65.0	>=19.81	2.3311	2	0.1083	0.0097
34	2.6755	1	>=65.0	>=19.81	2.4948	2	0.1057	0.0081
36	2.8442	1	>=65.0	>=19.81	2.6619	2	0.1033	0.0066
38	3.0169	1	>=65.0	>=19.81	2.8325	2	0.1009	0.0057
40	3.1936	1	>=65.0	>=19.81	3.0066	2	0.0986	0.0047

32 metre

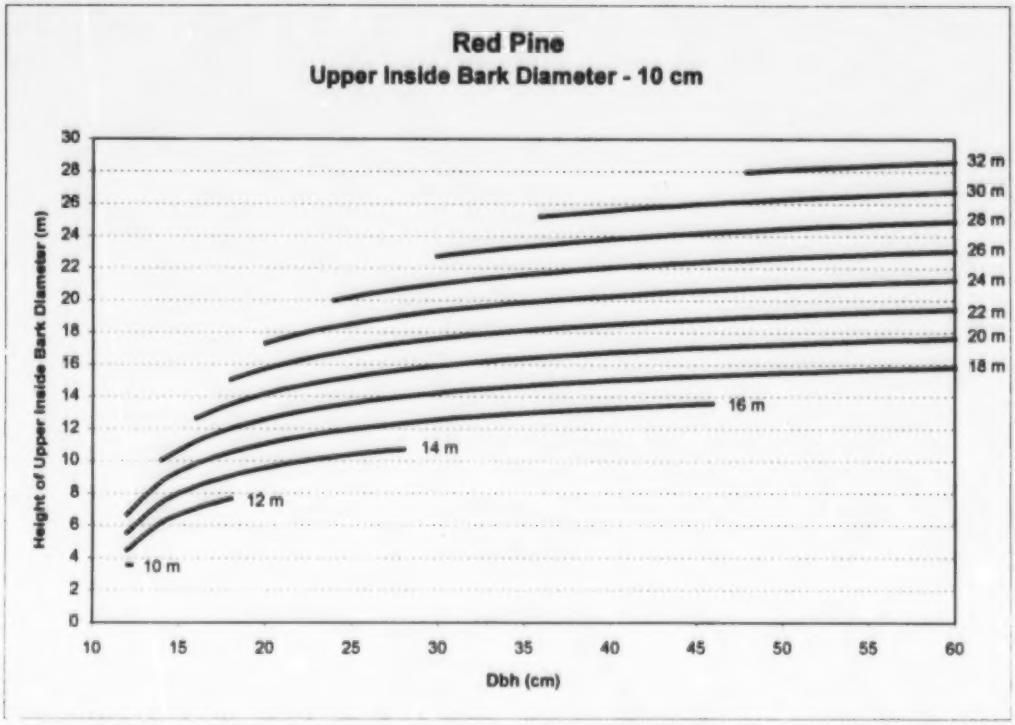
Total Height - 32 m Stump height - 0.3 m

Dbh (cm)	Gross Total Volume (inside bark) (m^3)	Pole Class	Pole Length (feet)	Pole Length (metres)	Gross Merchantable volume of poles (m^3)	No. of 2.54 m (8 foot) pulp logs after extracting poles	Gross Merch. volume of pulp logs after extracting poles (m^3)	Remaining Unmerch. volume after poles and pulp logs removed (m^3)
20	2.3721	2	>=65.0	>=19.81	2.2174	2	0.0940	0.0092
22	2.5408	1	>=65.0	>=19.81	2.3565	2	0.1140	0.0143
24	2.7140	1	>=65.0	>=19.81	2.5296	2	0.1114	0.0121
26	2.8916	1	>=65.0	>=19.81	2.7065	2	0.1088	0.0103
28	3.0734	1	>=65.0	>=19.81	2.8870	2	0.1064	0.0088
30	3.2595	1	>=65.0	>=19.81	3.0712	2	0.1041	0.0074
32	3.4497	1	>=65.0	>=19.81	3.2592	2	0.1019	0.0063

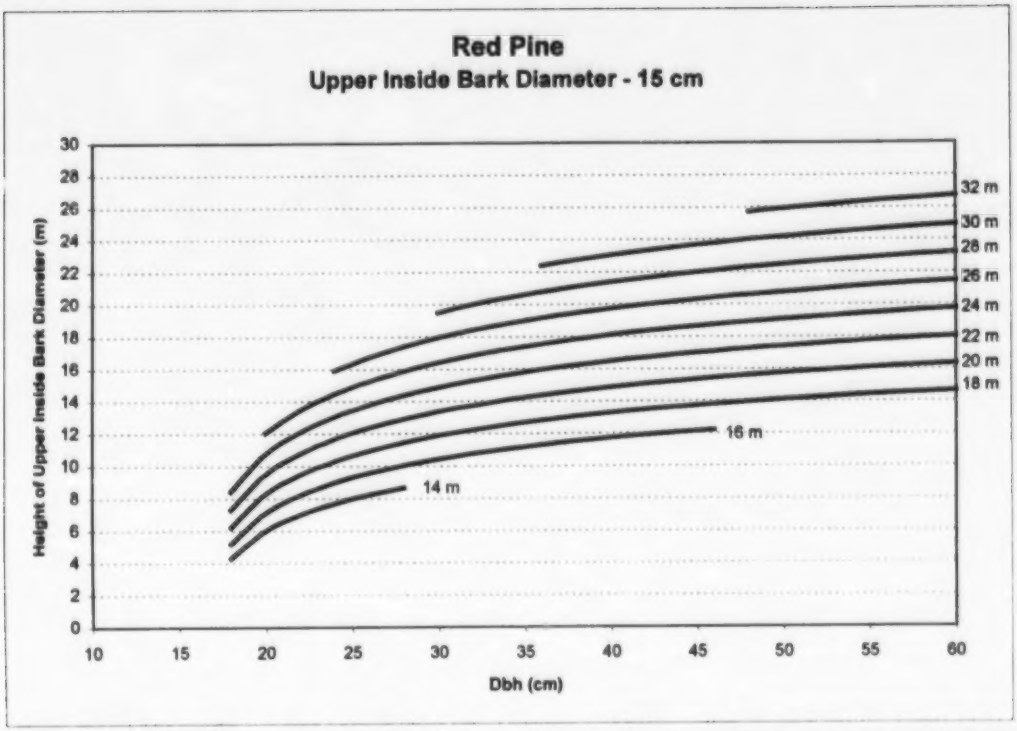
Appendix B-3
Height of Upper Diameter Limits for Red Pine



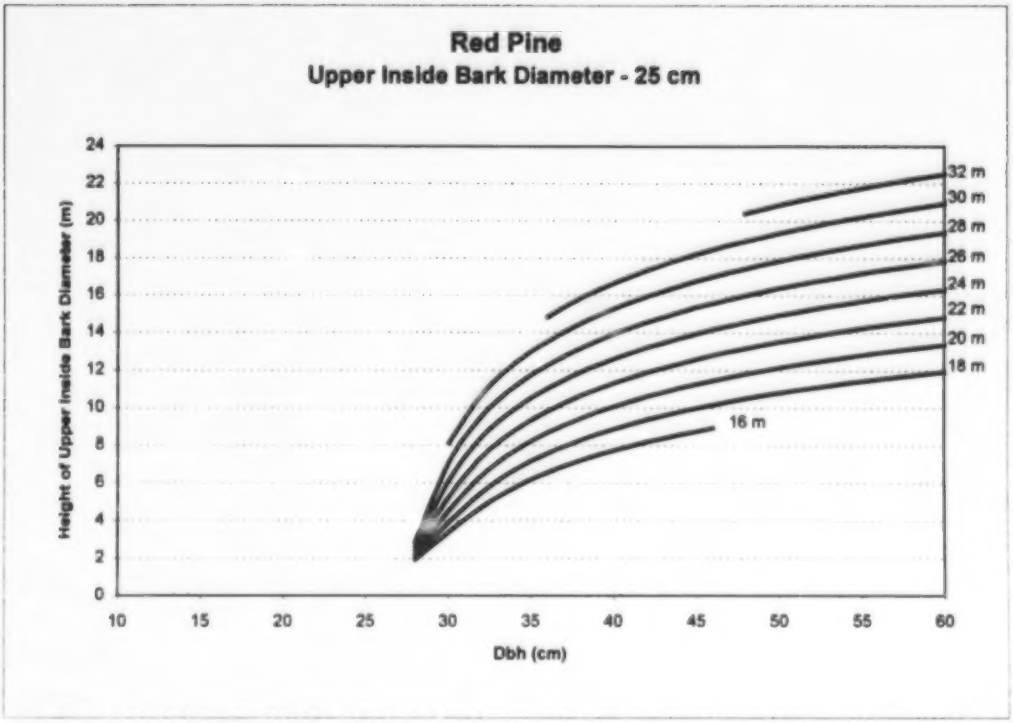
Dbh	Total Height of Tree in metres											
(cm)	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m	32 m
12	3.55	4.49	5.54	6.67								
14		6.17	7.41	8.70	10.03							
16		7.05	8.40	9.79	11.21	12.65						
18		7.65	9.06	10.52	12.00	13.51	15.03					
20			9.56	11.06	12.59	14.15	15.71	17.29				
22			9.94	11.48	13.05	14.64	16.24	17.86				
24			10.25	11.83	13.42	15.04	16.67	18.32	19.97			
26			10.51	12.11	13.73	15.37	17.03	18.70	20.38			
28			10.73	12.35	13.99	15.66	17.33	19.02	20.72			
30				12.56	14.22	15.90	17.59	19.30	21.01	22.73		
32				12.74	14.42	16.11	17.82	19.53	21.26	23.00		
34				12.90	14.59	16.29	18.01	19.75	21.49	23.23		
36				13.04	14.74	16.46	18.19	19.93	21.68	23.44	25.21	
38				13.17	14.88	16.61	18.35	20.10	21.86	23.63	25.41	
40				13.29	15.01	16.74	18.49	20.25	22.02	23.80	25.58	
42				13.39	15.12	16.86	18.62	20.39	22.17	23.95	25.75	
44				13.49	15.22	16.98	18.74	20.52	22.30	24.09	25.89	
46				13.58	15.32	17.08	18.85	20.63	22.42	24.22	26.03	
48					15.41	17.17	18.95	20.74	22.53	24.34	26.15	27.97
50					15.49	17.26	19.04	20.84	22.64	24.45	26.26	28.09
52					15.56	17.34	19.13	20.93	22.74	24.55	26.37	28.20
54					15.64	17.42	19.21	21.01	22.82	24.64	26.47	28.30
56					15.70	17.49	19.29	21.09	22.91	24.73	26.56	28.40
58					15.76	17.55	19.36	21.17	22.99	24.81	26.65	28.49
60					15.82	17.62	19.42	21.24	23.06	24.89	26.73	28.57



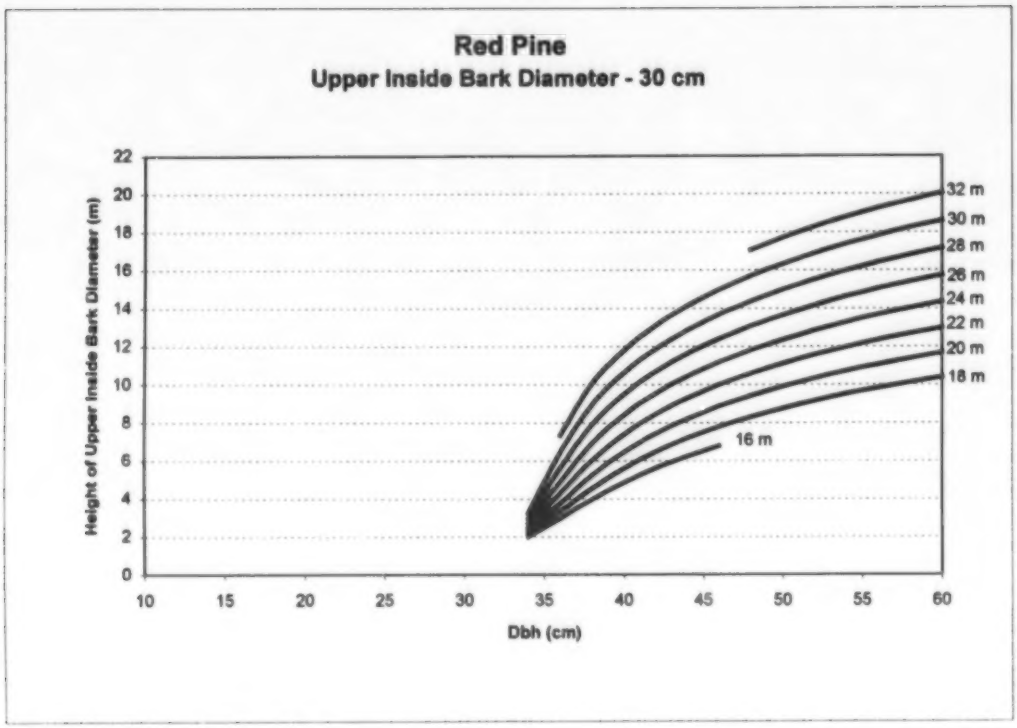
Dbh	Total Height of Tree in metres											
(cm)	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m	32 m
12	3.55	4.49	5.54	6.67								
14		6.17	7.41	8.70	10.03							
16		7.05	8.40	9.79	11.21	12.65						
18		7.65	9.06	10.52	12.00	13.51	15.03					
20			9.56	11.06	12.59	14.15	15.71	17.29				
22			9.94	11.48	13.05	14.64	16.24	17.86				
24			10.25	11.83	13.42	15.04	16.67	18.32	19.97			
26			10.51	12.11	13.73	15.37	17.03	18.70	20.38			
28			10.73	12.35	13.99	15.66	17.33	19.02	20.72			
30				12.56	14.22	15.90	17.59	19.30	21.01	22.73		
32				12.74	14.42	16.11	17.82	19.53	21.26	23.00		
34				12.90	14.59	16.29	18.01	19.75	21.49	23.23		
36				13.04	14.74	16.46	18.19	19.93	21.68	23.44	25.21	
38				13.17	14.88	16.61	18.35	20.10	21.86	23.63	25.41	
40				13.29	15.01	16.74	18.49	20.25	22.02	23.80	25.58	
42				13.39	15.12	16.86	18.62	20.39	22.17	23.95	25.75	
44				13.49	15.22	16.98	18.74	20.52	22.30	24.09	25.89	
46				13.58	15.32	17.08	18.85	20.63	22.42	24.22	26.03	
48					15.41	17.17	18.95	20.74	22.53	24.34	26.15	27.97
50					15.49	17.26	19.04	20.84	22.64	24.45	26.26	28.09
52					15.56	17.34	19.13	20.93	22.74	24.55	26.37	28.20
54					15.64	17.42	19.21	21.01	22.82	24.64	26.47	28.30
56					15.70	17.49	19.29	21.09	22.91	24.73	26.56	28.40
58					15.76	17.55	19.36	21.17	22.99	24.81	26.65	28.49
60					15.82	17.62	19.42	21.24	23.06	24.89	26.73	28.57



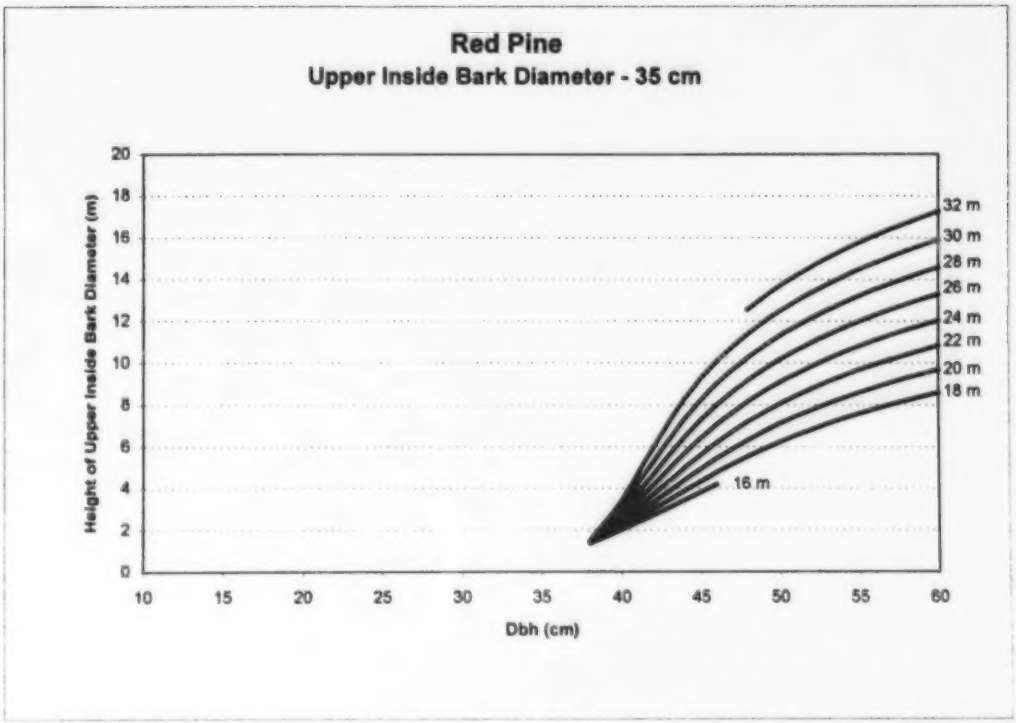
Dbh	Total Height of Tree in metres											
(cm)	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m	32 m
12												
14												
16												
18		3.52	4.29	5.20	6.21	7.30	8.45					
20			5.99	7.10	8.27	9.49	10.74	12.03				
22			6.98	8.19	9.46	10.76	12.09	13.45				
24			7.68	8.97	10.29	11.66	13.05	14.46	15.90			
26			8.22	9.56	10.93	12.35	13.78	15.24	16.72			
28			8.65	10.03	11.45	12.90	14.37	15.87	17.38			
30				10.42	11.87	13.36	14.86	16.39	17.93	19.49		
32				10.76	12.23	13.74	15.28	16.83	18.40	19.98		
34				11.04	12.55	14.08	15.63	17.21	18.80	20.40		
36				11.29	12.82	14.37	15.95	17.54	19.15	20.77	22.40	
38				11.52	13.06	14.63	16.22	17.83	19.46	21.09	22.74	
40				11.72	13.28	14.86	16.47	18.09	19.73	21.38	23.05	
42				11.90	13.47	15.07	16.69	18.33	19.98	21.64	23.32	
44				12.06	13.64	15.26	16.89	18.54	20.20	21.88	23.57	
46				12.21	13.80	15.43	17.07	18.73	20.41	22.09	23.79	
48					13.95	15.59	17.24	18.91	20.59	22.29	24.00	25.71
50					14.09	15.73	17.39	19.07	20.76	22.47	24.18	25.91
52					14.21	15.86	17.54	19.22	20.92	22.64	24.36	26.09
54					14.33	15.99	17.67	19.36	21.07	22.79	24.52	26.26
56					14.44	16.10	17.79	19.49	21.21	22.93	24.67	26.42
58					14.54	16.21	17.91	19.61	21.34	23.07	24.81	26.56
60					14.63	16.31	18.01	19.73	21.46	23.19	24.94	26.70



Dbh	Total Height of Tree in metres											
(cm)	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m	32 m
12												
14												
16												
18												
20												
22												
24												
26												
28				1.93	2.07	2.23	2.42	2.64	2.89			
30				3.38	3.90	4.52	5.25	6.10	7.06	8.11		
32				4.72	5.51	6.40	7.38	8.44	9.55	10.71		
34				5.75	6.69	7.70	8.79	9.93	11.12	12.35		
36				6.55	7.58	8.67	9.82	11.03	12.27	13.54	14.84	
38				7.20	8.28	9.43	10.64	11.89	13.17	14.49	15.83	
40				7.73	8.87	10.06	11.31	12.60	13.92	15.27	16.64	
42				8.18	9.36	10.60	11.88	13.20	14.55	15.93	17.33	
44				8.57	9.79	11.06	12.37	13.72	15.10	16.50	17.93	
46				8.92	10.16	11.46	12.80	14.17	15.57	17.00	18.45	
48					10.50	11.82	13.18	14.58	16.00	17.45	18.92	20.40
50					10.80	12.14	13.52	14.94	16.38	17.85	19.33	20.84
52					11.07	12.43	13.83	15.27	16.73	18.21	19.71	21.23
54					11.32	12.70	14.12	15.56	17.04	18.54	20.06	21.59
56					11.54	12.94	14.37	15.84	17.33	18.84	20.37	21.92
58					11.75	13.17	14.61	16.09	17.59	19.12	20.66	22.22
60					11.94	13.37	14.83	16.32	17.84	19.37	20.93	22.50



Dbh (cm)	Total Height of Tree in metres											
	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m	32 m
12												
14												
16												
18												
20												
22												
24												
26												
28												
30												
32												
34				2.00	2.14	2.31	2.49	2.71	2.95	3.23		
36				2.97	3.34	3.78	4.30	4.90	5.61	6.42	7.34	
38				3.96	4.55	5.24	6.02	6.90	7.87	8.91	10.01	
40				4.85	5.60	6.45	7.38	8.39	9.46	10.59	11.76	
42				5.61	6.47	7.41	8.43	9.52	10.66	11.84	13.06	
44				6.24	7.18	8.19	9.28	10.42	11.61	12.84	14.10	
46				6.78	7.78	8.85	9.98	11.16	12.39	13.66	14.95	
48					8.30	9.41	10.58	11.80	13.06	14.35	15.68	17.03
50					8.75	9.89	11.10	12.35	13.64	14.96	16.31	17.68
52					9.14	10.32	11.56	12.84	14.15	15.50	16.87	18.26
54					9.50	10.71	11.97	13.27	14.61	15.97	17.37	18.78
56					9.82	11.05	12.34	13.66	15.02	16.40	17.81	19.25
58					10.11	11.37	12.67	14.01	15.39	16.79	18.22	19.67
60					10.38	11.66	12.98	14.34	15.73	17.15	18.59	20.06



Dbh	Total Height of Tree in metres											
(cm)	10 m	12 m	14 m	16 m	18 m	20 m	22 m	24 m	26 m	28 m	30 m	32 m
12												
14												
16												
18												
20												
22												
24												
26												
28												
30												
32												
34												
36												
38				1.36	1.37	1.39	1.40	1.42	1.43	1.45	1.47	
40				2.01	2.14	2.30	2.47	2.67	2.89	3.15	3.43	
42				2.72	3.00	3.33	3.71	4.15	4.67	5.26	5.94	
44				3.45	3.89	4.41	5.00	5.69	6.46	7.32	8.27	
46				4.18	4.76	5.43	6.18	7.03	7.96	8.96	10.03	
48					5.54	6.32	7.19	8.14	9.16	10.24	11.37	12.55
50					6.22	7.09	8.04	9.06	10.14	11.27	12.45	13.67
52					6.81	7.75	8.76	9.83	10.96	12.13	13.35	14.60
54					7.34	8.32	9.38	10.49	11.66	12.87	14.12	15.39
56					7.80	8.83	9.92	11.07	12.27	13.51	14.78	16.09
58					8.21	9.28	10.40	11.58	12.81	14.07	15.37	16.70
60					8.59	9.68	10.84	12.04	13.29	14.58	15.90	17.25